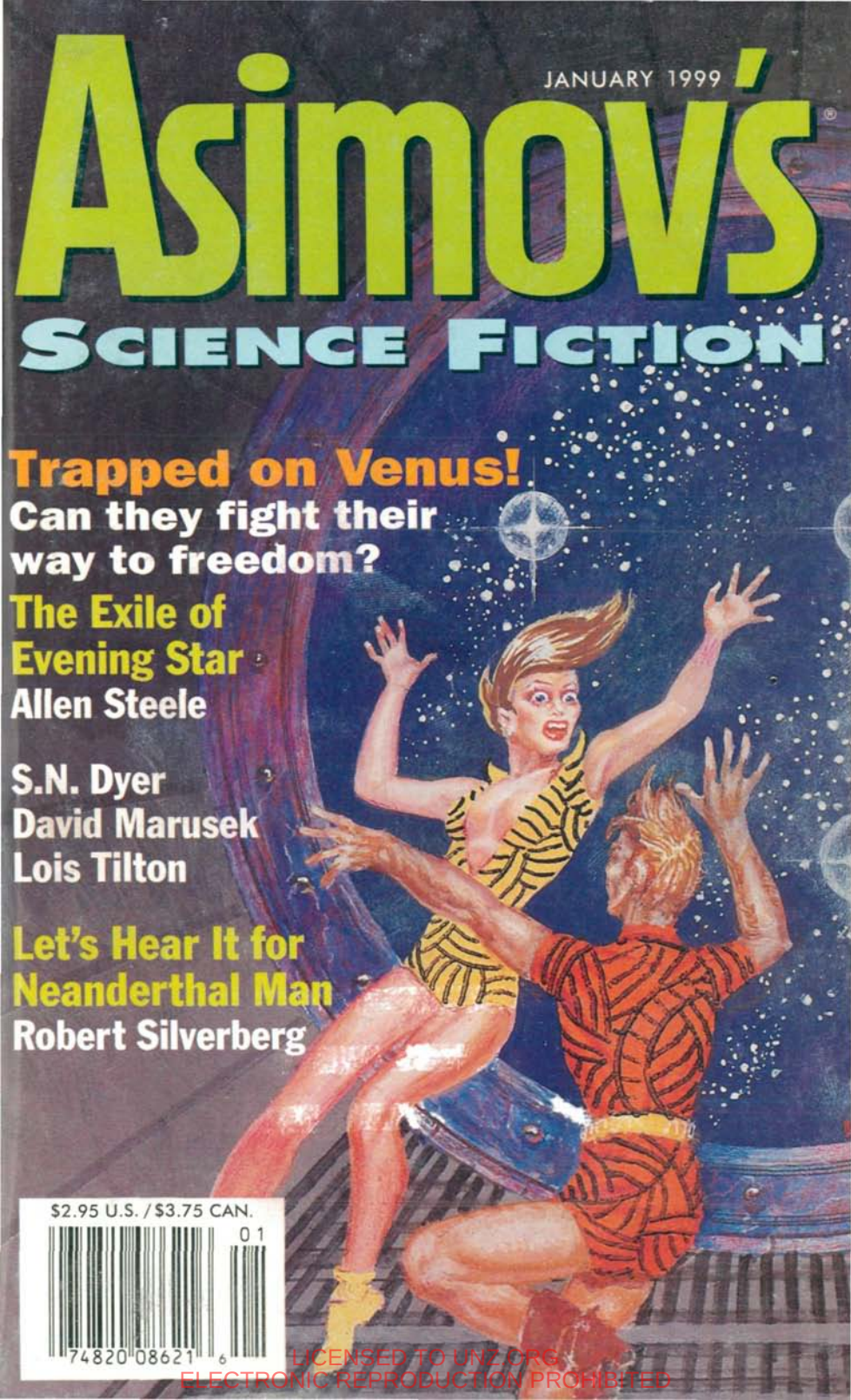
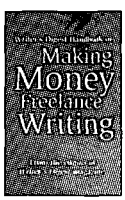


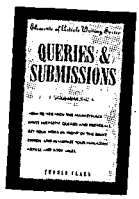
LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Discover the Secrets of Fiction Writing that Sells!



#10501 $19.99

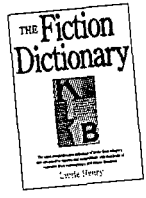
#10506 $16.99 pb



#10426 $15.99

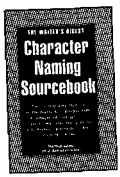
#10507 $16.99 pb

#10464 $22.99



#48008 $18.99

#43057 $27.98 pbs Count both books as one selection.
Volumes 1 & 2



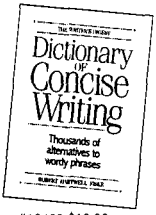
#10390 $18.99

#10025 $19.99

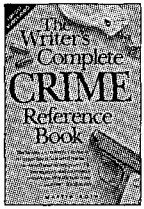
#10438 $17.99

#48003 $17.99

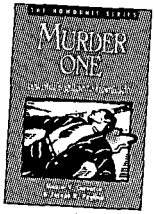
Description
How to engage readers and keep stories moving by creating vivid, believable depictions of people, places, events and actions
#10451 $15.99



#10482 $19.99

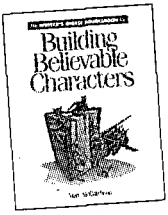


#10371 $19.99

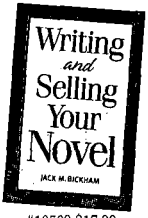


#10498 $16.99 pb

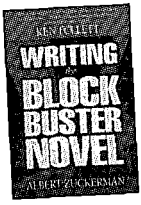
#10500 $21.99



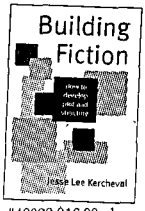
#10463 $17.99



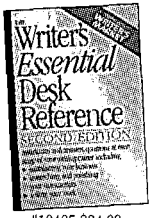
#10509 $17.99



#10393 $18.99



#48028 $16.99 pb



#10485 $24.99

AS A CLUB MEMBER, YOU'LL ENJOY:

- **DISCOUNTS FROM 15-65%** on every book you buy!
- **FREE SHIPPING & HANDLING** on prepaid orders (after this joining offer)!
- **SATISFACTION GUARANTEED 100%!**

HOW THE CLUB WORKS

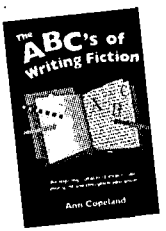
You'll receive the *BULLETIN* about fourteen times a year, featuring a Main Selection and 100 or more of the newest and best writing instruction books. If you want the Main Selection, do nothing, and it will be sent automatically. If you want a different book, or want nothing that month, you'll always have at least 10 days to decide and notify the Club by returning your Selection Card. If late delivery of the *BULLETIN* should ever cause you to receive a book you don't want, you may return it at Club expense. As a new member you agree to purchase one book from the *BULLETIN* within the next six months; after that, you may cancel your membership at any time. Each time you buy a book, your membership will be renewed for six months from the purchase date.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

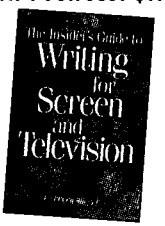
TAKE 2 BOOKS

FREE*

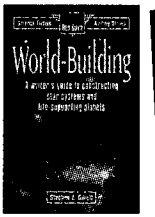
WITH 1 FOR JUST $9.95 WHEN YOU JOIN WRITER'S DIGEST BOOK CLUB!



48017 $18.99

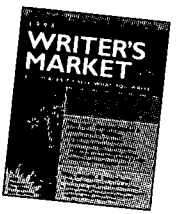


#10483 $17.99



#10470 $16.99

#10395 $16.99



#10512 $27.99 pb

MEMBERSHIP SAVINGS CERTIFICATE

☐ **YES!** I want to join Writer's Digest Book Club. Please sign me up and send me:

My first FREE book # _____	**FREE**
and my second FREE book # _____	**FREE**
with my third book # _____ for only	$ 9.95
*plus shipping and handling	$ 6.53
all for just	$ 16.48

(Payment in U.S. funds must accompany order. Ohio residents add 60¢ tax; Canadians in postal codes A, B or E add $2.47 HST; all other Canadians add $1.15 GST.)

☐ Check enclosed or Charge my ☐ VISA ☐ MasterCard

Acct # _____ Exp. Date: _____

I have read How The Club Works and agree to buy 1 more book in the next 6 months.

Signature _____
required on all certificates

Name _____

Address _____

City _____ State/Prov _____ ZIP/PC _____

Writer's Digest BOOK CLUB

Limited time offer good for new members in U.S. and Canada only. U.S. funds only. Allow 3-4 weeks for delivery. All applications subject to approval.

P.O. Box 12948 Cincinnati, Ohio 45212-0948

AS57

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Asimov's
SCIENCE FICTION

Vol. 23 No. 1 (Whole Number 276)
January 1999

Next Issue on Sale
22 December 1998

Cover illustration by
Kelly Freas

NOVELLA

94 The Exile of Evening Star ____ Allen Steele

NOVELETTES

14 The Ice Forest ____ Richard Wadholm
50 Dragons Teeth ____ Lois Tilton

SHORT STORIES

40 Yurek Rutz, Yurek Rutz, Yurek Rutz ____ David Marusek
70 Original Sin ____ S.N. Dyer
84 The Pragmatical Princess ____ Nisi Shawl

POETRY

69 Entropy I: The Original Text ____ Dylan Otto Krider
83 On the Wave-Particle Duality of Ghosts ____ Keith Allen Daniels
130 hook ____ Danny Daniels

DEPARTMENTS

4 Reflections: Let s Hear It for Neanderthal Man ____ Robert Silverberg
8 On the Net:TANSTAAFL ____ James Patrick Kelly
131 On Books ____ Peter Heck
137 Index ____
140 Thirteenth Annual Readers Award Ballot ____
143 The SF Conventional Calendar ____ Erwin S. Strauss

Gardner Dozois: Editor
Sheila Williams: Executive Editor
Isaac Asimov: Editorial Director (1977-1992)
Peter Kanter: Publisher

Stories from *Asimov s* have won thirty-two Hugos and twenty-four Nebula Awards, and our editors have received thirteen Hugo Awards for Best Editor. *Asimov s* was also the 1997 recipient of the *Locus* Award for Best Magazine.

Published monthly except for a combined October/November double issue by Dell Magazines, a division of Crosstown Publications. One year subscription $33.97 in the United States and U.S. possessions. In all other countries $41.97 (GST included in Canada), payable in advance in U.S. funds. Address for subscription and all other correspondence about them, Box 54625, Boulder, CO 80328-4625. Allow 6 to 8 weeks for change of address. Address for all editorial matters: *Asimov's Science Fiction*, 475 Park Avenue South, New York, N.Y. 10016. *Asimov's Science Fiction* is the registered trademark of Dell Magazines, a division of Crosstown Publications.

© 1998 by Dell Magazines, a division of Crosstown Publications, 475 Park Avenue South, New York, N.Y. 10016. All rights reserved, printed in the U.S.A. Protection secured under the Universal and Pan American Copyright Conventions. Reproduction or use of editorial or pictorial content in any manner without express permission is prohibited. All submissions must include a self-addressed, stamped envelope; the publisher assumes no responsibility for unsolicited manuscripts.

Periodical postage paid at New York, NY, and at additional mailing offices. Canadian postage paid at Windsor, Ontario, Canada Post International Publications Mail, Product Sales Agreement No. 260657. POSTMASTER, send change of address to *Asimov's Science Fiction*, Box 54625, Boulder, CO 80328-4625. In Canada return to 3255 Wyandotte Street East, Windsor, Ontario N8Y 1E9.USPS 533-310, ISSN 1055-2146. GST #R123293128

Printed in U.S.A.

PRINTED WITH SOY INK

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"Absorbing and exciting....Sarah Zettel is a writer to watch, a writer with a gift of character and situation, a writer who can keep you turning those pages as breathlessly as ever you have before."

—*Analog* on *Playing God*

"Ms. Zettel's confident treatment of her ambitious material shows just how entertaining the 'grand tradition of Heinlein and Asimov' can be in sympathetic hands."

—*The New York Times Book Review* on *Reclamation*, winner of the *Locus* Award for Best First Novel

From the award-winning author of *Reclamation* and *Fool's War*

SARAH ZETTEL

PLAYING GOD

"This is such a stunning novel that it is hard to believe the author has written only one book previously....An excellent choice for all SF collections, from a writer who is going places fast."

—*Kliatt* on *Fool's War*, a 1997 *New York Times* Notable Book of the Year

A NEW HARDCOVER

An Alternate Selection of The Science Fiction Book Club

ASPECT

http://warnerbooks.com

Where Imagination Knows No Bounds

©1998 WARNER BOOKS, INC. A TIME WARNER COMPANY THE ASPECT NAME AND LOGO ARE REGISTERED TRADEMARKS OF WARNER BOOKS, INC. ILLUSTRATION: STEVE YOULL

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

REFLECTIONS

by Robert Silverberg

LET'S HEAR IT FOR NEANDERTHAL MAN

For most of my life I've had a warm place in my heart for shaggy old Neanderthal man. As a small boy haunting the American Museum of Natural History in New York, I stared in wonder at the murals and dioramas depicting the Neanderthals at work and play, and found myself caught up somehow in a welter of speculation about these extinct folk, so uncouth-looking—bestial, even—with that mysteriously big brain and that odd spark of intelligence glimmering in their (reconstructed and hypothetical) faces.

What were they all about? I wondered. Were they really as savage and primordial and generally subhuman as they looked, a coarse and primitive rough draft for the species that was going to become our own glorious selves, or were they in fact pretty much equal in intelligence and ability to their *Homo sapiens* contemporaries, with rich cultural traditions about which we will never know a thing? And where did they go, the Neanderthals? The most recent Neanderthal fossil we have dates from about thirty thousand years ago. Were they wiped out by the rival species in a millennium-long campaign of genocide? Or did *Homo sapiens* simply absorb them by intermarriage until the distinctive Neanderthal traits had been completely bred out of existence? Could it be that there were still a few Neanderthals walking the earth somewhere, closely shaved and carefully disguised as stockbrokers or New York City taxi drivers?

Soon after I discovered the Neanderthals I discovered science fiction, and enough tales of prehistoric man to fill a library. Usually the Neanderthals were portrayed as the bad guys—ugly smelly brutes who pelted our Cro-Magnon forebears with rocks from a safe distance, but eventually were Put In Their Place. Not always, though. Lester del Rey's "The Day is Done" (1939) was a touching story told from the viewpoint of a sympathetic Neanderthal: Lester was ever a contrarian, and a champion of the underdog besides. L. Sprague de Camp's "The Gnarly Man" (1939) provided a wry look at an immortal Neanderthal who had lived on into our own day, and Philip José Farmer's "The Alley Man" (1959) dealt with the same theme in a very different way.

The mysterious Neanderthals have figured conspicuously in my own work as well. I edited an entire anthology of Neanderthal stories in 1987, in which you will find the de Camp and Farmer stories, along with Isaac Asimov's wonderful "The Ugly Little Boy" and eight others. My 1988 story "House of Bones" shows Neanderthals as neither stylish nor clever, but definitely human even so. And in 1991 Isaac and I expanded his "Ugly Little Boy" into a novel of the same name, in which the Neanderthals are shown as having a culture every bit as complex as that of their *Homo sapiens* supplanters. My curiosity about these strange and virtually unknown people continues to this day: where, I wonder, do they fit into the human evolutionary pattern, how human actually were they, and why did they disappear?

Recently some answers to two of

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

those three big questions have emerged.

That they were a separate evolutionary line, not at all ancestral to us, has been my belief for a long time. Now we have hard evidence of that. A team led by Dr. Svante Paabo of the University of Munich has succeeded in extracting and analyzing DNA from the bones of the first Neanderthal fossil ever discovered, the one found in 1856 in the Neander valley near Dusseldorf, Germany. The particular kind of DNA that the Munich team recovered is known as mitochondrial DNA, found in egg cells and therefore a powerful indicator of an organism's genetic makeup. The Neanderthal DNA, when compared with modern human DNA samples drawn from five continents, proved to be wholly distinctive. So widely did it differ from *Homo sapiens* DNA that there appears to be no likelihood of interbreeding between Neanderthals and modern humans. The DNA evidence indicates that the Neanderthals diverged from the main line of human evolution at least three hundred thousand years ago, perhaps even earlier, and must be regarded as an ancient hominid form only remotely related to us, and in no way ancestral.

So much for the theory that the Neanderthals might have been bred out of existence by genetic absorption into *Homo sapiens*. Their genes and ours have little in common. So we are left with the genocide theory, a long and ultimately successful war of extermination by the earliest of Master Races, or else with the possibility that the Neanderthals, a cold-climate species, were simply unable to adapt to the warming of their European homeland at the end of the last glacial period and faded into extinction. (The truth, if we ever discover it, may well turn out to be a combination of the two.)

GARDNER DOZOIS:
Editor

SHEILA WILLIAMS:
Executive Editor

JARED GOLDMAN:
Editorial Assistant

EVIRA MATOS:
Editorial Assistant

SUSAN KENDRIOSKI:
Executive Director, Art and Production

VICTORIA GREEN:
Senior Art Director

SHIRLEY CHAN LEVI:
Assistant Art Director

CAROLE DIXON:
Production Manager

ABIGAIL BROWNING:
Manager Subsidiary Rights and Marketing

JULIA McEVOY
Manager, Advertising Sales

BRUCE W. SHERBOW:
Director of Newsstand Sales

SANDY MARLOWE:
Circulation Services

PETER KANTER:
Publisher

CHRISTINE BEGLEY:
Associate Publisher

ISAAC ASIMOV:
Editorial Director
(1977-1992)

ADVERTISING REPRESENTATIVE
David Geller Publishers' Rep. (212) 682-1540

CLASSIFIED ADVERTISING
Russell Johns Associates (800)237-9851

Please do not send us your manuscript until you've gotten a copy of our manuscript guidelines. To obtain this, send us a self-addressed, stamped business-size envelope (what stationery stores call a number 10 envelope), and a note requesting this information. Please write "manuscript guidelines" in the bottom left-hand corner of the outside envelope. The address for this and for all editorial correspondence is *Asimov's Science Fiction*, 475 Park Avenue South, New York, N.Y. 10016. While we're always looking for new writers, please, in the interest of time-saving, find out what we're looking for, and how to prepare it, before submitting your story.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

They were different, yes. Can we regard them as human?

We know very little about their culture, and what we have is not very impressive. The glorious cave paintings of Western Europe were done by *Homo sapiens,* not by Neanderthals. Such Neanderthal artifacts as we have are crude, simple things.

But they buried their dead, which apes don't do. One Neanderthal fossil is that of a man who was crippled with arthritis and had only two teeth left. Someone had cared for him, had found food that he could chew and brought it to him, and eventually had given him a decent burial. Another Neanderthal fossil shows evidence of the amputation of a withered arm by some ancient surgeon; the patient had survived the operation by many years. One German cave that had been inhabited by Neanderthals contained ten bear skulls in niches in the walls, more in a crude stone box, and other bear bones on a stone platform. These traces of a bear cult seem to indicate some form of religious belief.

It has never been clear, though, that the Neanderthals were capable of speech. Animals have many ways of communicating, of course: such things come to mind as the curious directionally oriented dances of honeybees, the "songs" of humpback whales, the cries and gestures of chimpanzees. My cat has a whole repertoire of meows of varying semantic content ("Feed me!" "What is that other cat doing here?" "This is not an adequate kind of food!" "I would like to sit on you now."). But cats and whales and chimps are animals, all the same. Their "speech" is largely instinctive and inflexible. They lack the means for transmission of complex concepts from individual to individual or from generation to generation that is essential to the development and expansion of a culture.

And so, it seemed, did the Neanderthals. Although they had brains of large size—larger, on the average, than ours—that alone is no necessary indicator of the ability to speak. The brains of elephants are bigger than ours too, but elephants don't have the anatomical features required for the precise shaping of sounds, nor do gorillas and chimpanzees and all other high primates except ourselves, and for a long time it was thought that those features were absent from Neanderthals too.

Recent research indicates otherwise. The first clue came in 1983, when scientists at Tel Aviv University uncovered a sixty thousand-year-old Neanderthal skull in Israel and were able to detect the presence in it of the hyoid bone, a structure important to the ability to articulate the complex sounds of language. But that discovery in itself did not demonstrate that Neanderthals were sufficiently well supplied with the nerve fibers that run from the brain to the tongue and make true speech possible. Indeed, there was anatomical reason to think they were capable of nothing more than simple grunts.

Now a group of anthropologists at Duke University has shown that they could do better than that. There is a small tubular opening at the base of the primate skull known as the hypoglossal canal, through which runs the nerve that carries signals from the brain to the tongue. This canal is about twice as wide in humans as in chimpanzees and gorillas; the wider the canal, presumably, the larger the number of nerve fibers that can pass through it, and, consequently, the greater control over the sound-shaping movements of the tongue.

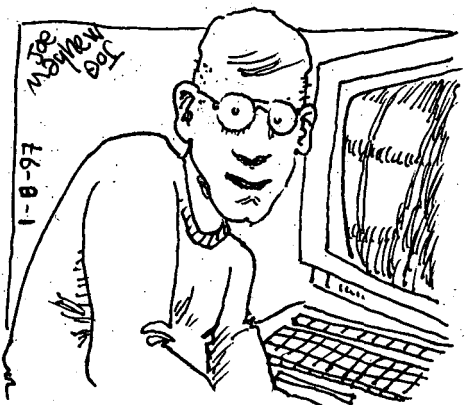
The Duke researchers examined the hypoglossal canals of a series of hominid fossils beginning with *Australopithecus africanus,* a proto-hu-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

man creature who lived two and a half million years ago. The diameter of the australopithecine hypoglossal canal was no wider than that of a chimp; but the skull of an archaic *Homo sapiens* form from Africa, dating back close to four hundred thousand years, had one about the size of ours—as were the canals at the base of a pair of Neanderthal skulls from France of seventy thousand years ago.

It seems likely, then, that the Neanderthals were able to speak. The anatomical perquisites were there. There is still some debate about whether they could shape such vowels as a, i, and u—a matter of whether their larynxes sat high in their necks, as those of apes do, or lower down, as in humans—but they should have been capable of managing articulate sounds even so. Well enough, I want to think, to have had the ability to teach their young the art of manufacturing weapon points, to exchange tips with each other on the best hunting tracks, to sing Neanderthal hymns to Neanderthal gods, even to swap gossipy tribal chitchat around the campfire on those long chilly Pleistocene nights.

I certainly hope so. The poor weak-chinned bulgy-browed things have been much maligned in science fiction over the decades (though not in mine). Usually they've been shown in a patronizing, condescending way—shambling, clumsy, flea-bitten also-rans of the evolutionary race, ugly and sullen and generally unpleasant. The English philosopher Thomas Hobbes described the life of primitive man this way in a book written in the seventeenth century, long before the finding of the first Neanderthal fossil: "No arts; no letters; no society; and which is worst of all, continual fear and danger of violent death; and the life of man, solitary, poor, nasty, brutish, and short." Perhaps that's a sharp description of Neanderthal life too. But I prefer to imagine them as a happier bunch, who in the hundreds of thousands of years that they dominated Europe had a rich spoken culture, replete with folklore and myth and epic poetry as well as the humbler chatter of everyday life, until the sleek long-legged Cro-Magnon types showed up to take over the neighborhood. ❍



LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

On the Net

James Patrick Kelly

TANSTAAFL

"TANSTAAFL. There ain't no such thing as a free lunch."
—Robert A. Heinlein

Actually, it's unlikely that Heinlein coined this aphorism, although most agree that the acronym is his. I wanted to use it to introduce this column except that I had forgotten where I'd read it. Was it *Stranger in a Strange* Land or *The Moon Is a Harsh Mistress?* I settled the question at a handy little site called **Quotable Heinlein** *(www.vitalnet.com/heinlein/index.shtml).* It is from *The Moon Is a Harsh Mistress,* of course. You can browse this database of quotes or search for specific opinions. Either way, you'll discover—or rediscover—how astonishingly blunt "The Dean of Science Fiction" could be. See, for example, his take on Isaac Asimov. Here's another nugget, this time from *Stranger*: "Never trust machinery more complicated than a knife and fork."

A computer, of course, is the most complicated piece of machinery any of us is likely to own. As I write this in July, I am on the road to a recovery from a catastrophic hard disk crash. Yes, I saw the Blue Screen of Death in Windows and lived to tell the tale, although many, many innocent files were forever lost. So if you flamed me way back in the summer and I never replied, believe me, it wasn't personal.

Meanwhile, allow me make a public service announcement for the benefit of my fellow procrastinators: BACK UP YOUR DATA, DAMN IT!

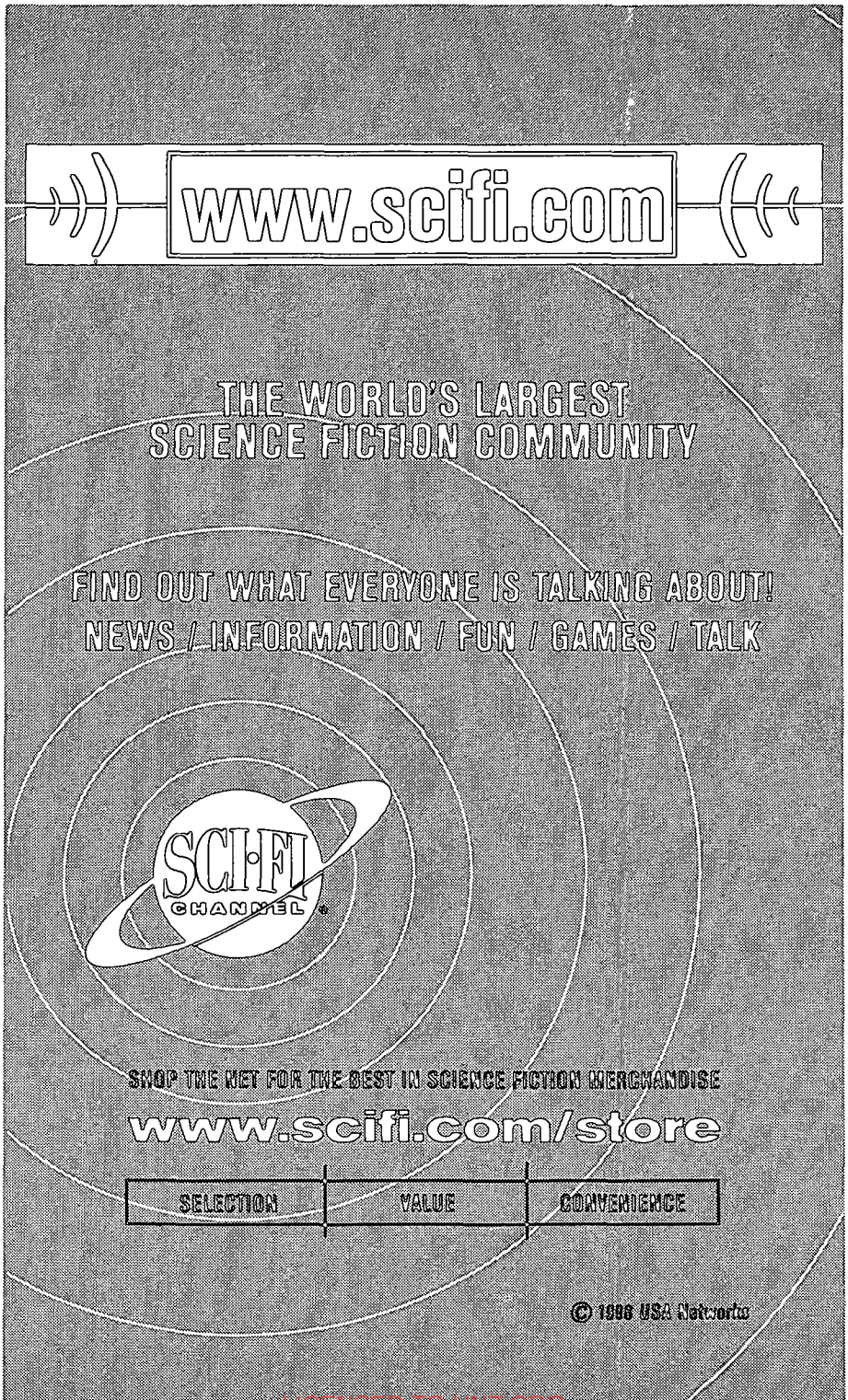
The upshot of my little disaster was that I bought a new computer, which got me to thinking about the tolls on the infobahn. Although the overwhelming majority of websites today are "free" in the sense that we don't have to pay to stop by and make use of their resources, there is, in fact, no such thing etc., etc. For example, the cost of access is not insignificant. Sure today's computers and modems are comparative bargains, but IBM and Compaq and Apple aren't exactly giving away hardware. And then there are the ISPs to pay every month. And let's not forget the ubiquitous ad banners that subliminally insinuate themselves into our unconscious. Talk about computer viruses!

Free Lunch, Anyone?

Always bearing in mind that the world wide web is not, in fact, free, we can nevertheless look to it for some amazing infobargains.

Take, for example, our great metropolitan newspapers. Here are four papers that millions of people pay good money to read; the cost to netizens is nothing: the New York **Times** *(www.nytimes.com),* the Washington **Post** *(www.washingtonpost.com),* the Chicago **Tribune** *(www.chicago.tribune.com)* and the Los Angeles **Times** *(www.latimes.com).* Newspapers do an excellent job of covering breaking science news for the general reader. Although their takes on media science fiction are sometimes skewed by mundane sensibilities,

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

their book reviews are usually well worth your attention. There are many, many more newspapers besides these four online: check them out on **Yahoo** *(www.yahoo.com/News_and_Media/Newspapers).*

In a previous column I steered you toward **Project Gutenberg** *(http://www.promo.net/pg/),* where you can browse an enormous collection of books that have passed into the public domain. Recently, I found a site called **BiblioBytes** *(http://www.bibliobytes.com/)* that offers free books of much more recent vintage, by award winners like Nancy Kress, Octavia Butler, Barry Longyear, Spider Robinson, and Harlan Ellison—and that's just a selection from the science fiction section of this site. From what I can gather, BiblioBytes started out as a commercial site where you could sample a book and then order the complete text for a small fee. It has since evolved into a site where you can read entire books for free. There are two catches: you can't download the books to read offline and you can only read one page at a time. This will no doubt limit the usefulness of BiblioBytes for many, but this site does point the way to a new way of net publishing. See the rant below.

Not in the mood for online novels? Check out **Infinity Plus,** the science fiction and fantasy archive *(http://www.users.zetnet.co.uk/iplus/).* This British site is the brainchild of the indefatigable Keith Brooke; it contains over 289,000 words of short fiction. Brooke explains his goal for the site, "Science fiction and fantasy still share a (relatively) thriving short fiction market, but what happens to the stories once they've been published? Sure, some of them get picked up for reprints or translations, but a lot of excellent work becomes hard to get hold of a very short time after it first appears. Infinity Plus aims to make some of these stories available again." Brooke's site features stories and comment by some of the top science fiction and fantasy authors working today, including Stephen Baxter, Lisa Goldstein, Paul J. McAuley, Patricia Anthony, Kit Reed, Peter F. Hamilton, Ian McDonald, Greg Egan, Terry Bisson, and Ian Watson. Oh yeah, and me. I don't feel as though I need to make a conflict of interest statement in recommending this site because neither I nor any of the other writers receive recompense for allowing IP to reprint our work. What am I, nuts? Maybe, but that's not why I gave a story on IP.

We Interrupt this Column for a Brief Rant

I believe in the concept of a reprint science fiction web 'zine. Not only would it be a boon for the genre, but it would be good for yours truly. Some of my best work is moldering in the hanging folders of my bottom desk drawer where nobody can read it. But forget my stuff; it ticks me off that I can't easily find the masterpieces of some of my literary heroes, folks like Damon Knight, Theodore Sturgeon, Cordwainer Smith, and Shirley Jackson. There's no reason these writers should be out of print in the age of the world wide web.

When Keith Brooke first approached me, I surfed over to IP and discovered a site that was tastefully designed, easy to navigate and filled with work by writers I admired. It had everything I wanted—except a paycheck. So I gave him a story, one story. Someday I may send him another. But what I'd really like is for IP or some other enterprising site to take forty Jim Kelly stories and the complete works of Charles Beaumont and Alfred Bester and make them available on the web for a small fee. I think people would pay a nickel to read "Fondly Fahrenheit."

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Or two cents for "One Ordinary Day, With Peanuts." I know I would.

I've exchanged email with Keith Brooke on this subject and he acknowledges the problem of paying for the fiction he reprints. We're still inventing the economic infrastructure of the web; there's no universal standard yet for collecting micropayments. But there should be a site that combines the best aspects of BiblioBytes and Infinity Plus, and I'm convinced there will be, before too much longer. Me, I'm tired of waiting.

Where were we?

Conflict of interest alert! **SF Site** *(www.sfsite.com)* hosts the *Asimov's* website. Now that we've got that out of the way, SF Site offers a lively mix of reviews and opinion and some great link pages. Although the literary focus is on novels, Managing Editor Rodger Turner and his staff make an effort to cover short fiction as well. Editor's Choice, for instance, is a regular column by the redoubtable Dave Truesdale, whose printzine **Tangent** *(http://www.sff.net/tangent/)* attempts to review every short story published in the genre. Here Truesdale discusses just one story—thank goodness—selected from a different magazine each month. Intrepid readers of this publication will want to search the archives for a three-part series written by SF Site publisher John O'Neill called "A Brief History of *Asimov's Science Fiction Magazine*." I've been hanging around *'Mov's* since Shawna McCarthy first bought a story of mine in 1982; it looks to me as though O'Neill has been paying close attention. There may not yet be a definitive history of your favorite SF magazine, but this will do nicely until one comes along.

I do have a quibble about SF Site, however: the first couple of times I stopped by, I was put off by its very busy opening screen. To get a better idea of the scope of this fine website, click on the contents icon or, better yet, begin your visit at *www.sfsite.com/contents.htm*.

Star Drive

One of the oldest ideas in modern science fiction is faster than light travel. Without it there would have been no Golden Age, no Asimov, Clarke or Heinlein. But the dirty little secret of FTL is that it isn't science fiction at all. Einstein seems to be telling us it that it's fantasy. There can be no starship troopers or galactic foundations; absent the highly impractical generation ship, our childhood here in the solar system will never end.

Or will it? Recently NASA awarded a contract to create the **Institute for Advanced Concepts (NIAC)** *(http://www.niac.usra.edu/)* whose purpose is to explore "revolutionary" and "imaginative" space technologies. While NASA is a long way from endorsing any scheme for a FTL drive, many see NIAC as an organization whose mandate is to create the breakthrough that humankind will need to reach the stars.

If our government errs on the side of caution in contemplating a future for FTL, **Stardrive** *(http://www.stardrive.org/)* is gung ho for the galaxy. On the subject of FTL, Stardrive proclaims, "Rapid and practical interstellar travel is possible. Humans may not need to spend long periods in space. And there's plenty of evidence out there that we are not alone."

Whoa!

After a way-cool opening page, Stardrive assaults the eye with a garish index that has a very large crank factor, indeed. The logic of

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

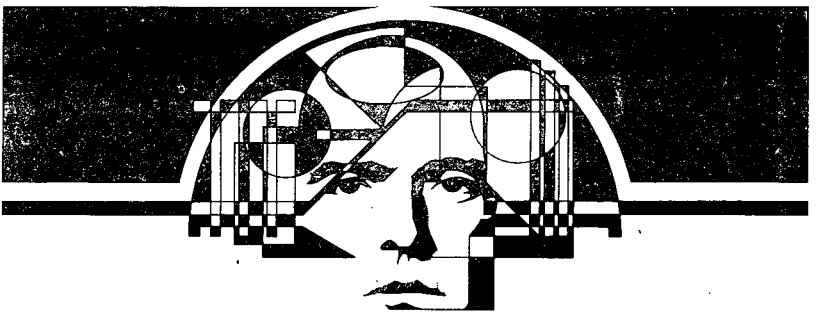
easy travel to the stars means that other civilizations will have mastered FTL as well. The position of Stardrive on UFOs would seem to be somewhere between *The X-Files* and *Men in Black*. I'm not much of a UFO fan, so I give most of this material a pass. What did catch my eye were a number of papers that offered theories of how FTL just might work. But what will it cost to convert a theory into the starship *Enterprise*? Well, just remember: There ain't no such thing as a free lunch.

Stardrive is a site that presents as science but can read a lot like science fiction. Still, if enthusiasm is all we need to reach the stars, then the descendants of the folks at Stardrive may someday be posting their page from the Epsilon Eridani system.

Exit

I recently taught at the **Clarion East Writers Workshop** *(http://pilot.msu.edu/~lbs/clarion/select.html)* with my friend **Nancy Kress** *(http://www.sff.net/people/nankress/)* and on the last day she wrote on the board of the workshop room, "Stuff costs." Although she was talking about conflict and character in science fiction, her aphorism also applies to the net. And to life too, come to think of it.

Stuff costs. Sounds like something Heinlein might have said. It's just a question of who pays. ○



www.asimovs.com

Visit our website for sneak previews of articles, stories, editorials, art, and puzzles, as well as our on-line forum, where you can communicate with other *Asimov's* readers from anywhere in the world. E-mail comments to us directly at **asimovs@erols.com.**

Don't miss *Asimov's* co-hosted chats with the Sci-fi Channel at **www.scifi.com/chat** (or link to the chats via our home page, **www.asimovs.com**). Chats will be moderated by **Gardner Dozois.**

Bruce Sterling	November 24, 1998	@ 9:00 p.m. EST
Maureen McHugh	December 8, 1998	@ 9:00 p.m. EST
James Patrick Kelly	December 22, 1998	@ 9:00 p.m. EST

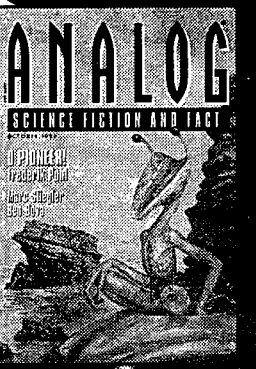
LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

TOUR THE UNIVERSE

for just $8.95!

You Save 40%

Explore the boundaries of imagination with the Analog Science Fiction Value Pack. You get five of our most popular back issues for just $8.95 plus shipping. That's a savings of 40% off the regular price!



Complete the order form below and mail it back to us with your payment today.

PENNY MARKETING

Dept. SM-100, 6 Prowitt Street, Norwalk, CT 06855-1220

☑ **YES!** Please send me my **Analog Science Fiction Value Pack**. I get 5 back issues for just $8.95 plus $3 shipping and handling ($11.95 per pack, U.S. funds). **My satisfaction is fully guaranteed!** My payment of $ _____ is enclosed.
(AFPK05)

Name: _____
(Please print)

Address: _____

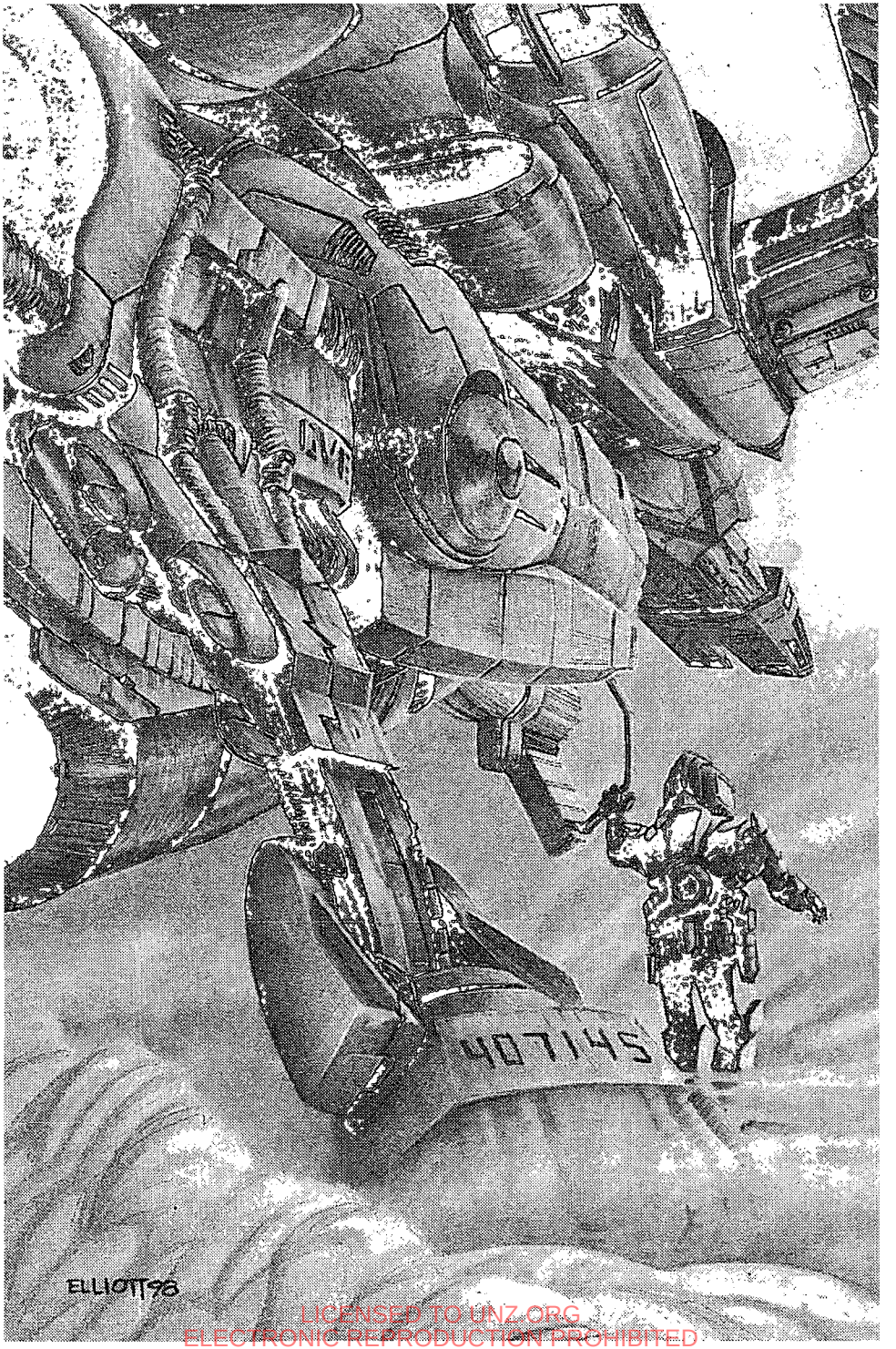
City: _____

State: _____ **ZIP:** _____

Please make checks payable to Penny Marketing. Allow 8 weeks for delivery. Magazines are back issues shipped together in one package. To keep prices low we cannot make custom orders. Add $4 additional postage for delivery outside the U.S.A. Offer expires 6/30/99.

068C-NANVLL

LICENSED TO ISFDB.ORG
ELECTRONIC REPRODUCTION PROHIBITED



LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Richard Wadholm

THE ICE FOREST

Richard Wadholm lives in California with his wife Rebecca and his step-daughter, Sharman. He is an art director for a phone directory company in the San Fernando Valley, and a 1997 graduate of Clarion West. Although he's published an assortment of nonfiction, "The Ice Forest" is his first science fiction sale.

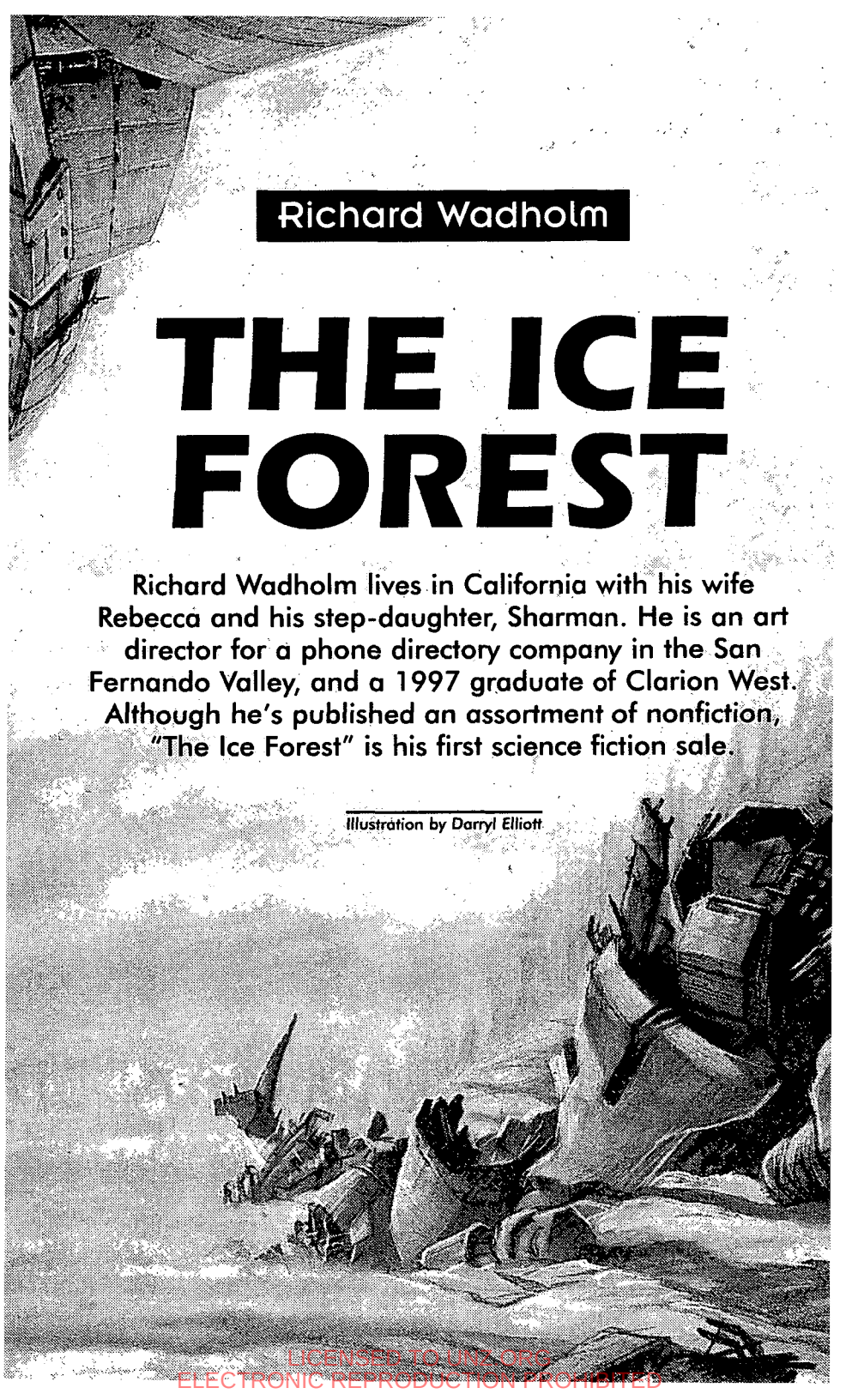


Illustration by Darryl Elliott

LICENSED TO LINZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

That night I dreamed of Robin for the last time.

I remember sitting at the tiny dinette. I remember wondering about the rings on our stainless steel counter, how do you get coffee rings on stainless steel?

Robin was talking about a job opening up for a research assistant on Europa. I was half-listening. I asked her why she was talking about a job on Europa of all places. I think I laughed. I don't know for sure, but I usually laugh at this point in the dream.

I remember her eyes rising up from the paper in her hands. The paper is trembling. So are her hands.

How many nights had I faced this moment since I'd arrived at Lowell? Robin asks me if I want her to stay. She *asks* me. A word and my whole life could be different.

But words come no more easily in dreams than they do in real life. I tell her she has to do what's right for herself. I could have told her how much I loved her. Would that have kept her? I don't know. It would have been true.

The dream goes on from there into places that quease my stomach just thinking about them. Any rescue is welcome, even when it's big old Sergeant Emerich thumping emphatically at my door.

I knew what he was here for—only one reason the military would trouble my sleep. The power reflector at Marsdale Crater had slipped off target again. They needed me to fly up and bring it back on line.

I put my hand over my eyes. I could still smell her perfume.

"How bad is it?" I asked him. I think I had some idea of telling Emerich where to go—like I would hit a guy six inches taller than me, with a license to kill. But I had a chip on my shoulder in those days, a hair trigger toward authority. Like all cowards, I guess.

"It's bad," he said. "The worst it's been. We'll have this place evacuated before you get back."

The broadcast power beam at Marsdale Crater was the classic engineers' nightmare—an intermittent problem that couldn't seem to get fixed.

It had been slipping off calibration for a Plutonian month. A sort of routine had settled in. The reflector would go down and Pavel Mortensen, or the military would send somebody up to fix it. The reflector would come back up.

Everything would be back to normal for a little while, but for one thing. Those people who went to look at the reflector? Something terrible always seemed to happen to them.

Emerich had the moral vision to ask me if I was scared. I just laughed. Scared? Me?

I want a squad of soldiers, The Coward raged. Or you can burn your wave function diagrams to stay warm for all I care. I want a big, fast, nasty ship with a five kilowatt spitter on the roof. This Kid ain't gonna blow himself out into space like Ronny Gallen did. He ain't gonna button everything up and just disappear into the storm like Nicol Szérda.

I realized I was hyperventilating. I wiped at my upper lip. "What do you take me for?" I laughed an easy, casual laugh. "Danger is my business. Hey."

Emerich said nothing. Maybe I fooled him. That's what I told myself, anyway.

No big, fast, nasty ship awaited me up in the GEV bay. No squad of soldiers stood at attention.

The army had gone this far for me—they'd donated one of their anointed to make sure I got up to Marsdale Crater in one piece.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

I knew Lieutenant Alcala from the Steering Committee meetings between the military and Mortensen's physics group. She sat way down the table, at the low end of a cadre of mid-level officers.

Her comments centered on one of two concerns—trying to keep her kids from screwing off too much, and trying to keep her superiors from getting them killed.

She seemed like a natural-born personnel manager. I never knew she could fly a GEV, not even in good weather. I was a little concerned to see her in the pilot's seat, waiting to take me up.

I called to her over the roar of the autumn gale. "Nobody's worried about losing you on the Tombaugh Ice Sea?"

Alcala snapped her gum in a thoughtful way. Her sleepy, sardonic eyes never changed.

"Don't worry," she said, "I'm God's own GEV pilot."

"Great," I said. "God's Own GEV pilot. And here I thought He took the commercial shuttle."

She stared at me. *Maybe,* I thought, *Mexican girls don't really get irony.* She leaned past me to motion up at the bay chief. The atmosphere bled out with a reedy whistle.

I noticed her ground bag in the back, next to the open toilet. And wasn't that Ronny Gallen's flaming, day-glo orange palm-top computer sticking out of the side pocket? The late, great Ronny Gallen—soldier, broadcast power technician, and discoverer of life on Pluto?

I started to ask her about that. Alcala gave me a look and said, "Wait a couple minutes, till we get up."

Then the bay door cycled open and that was pretty much it for conversation.

We lifted straight into the face of a storm that had been sweeping the shores of the Tombaugh Ice Sea for the past twenty-three years. It was like diving into a rip tide.

My last night at Tycho, Robin told me how bored I would be out here. She thought Pluto was a silent, dreamlike place drifting at the edge of eternity. She had this idea I'd taken a job at Lowell to escape running into her in the corridors of Tycho University.

Pluto in the autumn is a hellacious place. The atmosphere is freezing and precipitating onto the ground. Vacuum remains behind, instability. In the losing battle for equilibrium, even millibars of nitrogen and methane can gather up in waves and sweep the planet clean as a beach after a tidal wave.

I had friends up on Charon who told me they knew when Lowell Base was getting hit bad; they would find our garbage scattered in the ice all around them.

So Alcala and I didn't talk much during the next two hours. The extent of our idle conversation consisted of her asking me a couple of times if I wanted to turn back. I was afraid what would come out of my mouth, so I kept silent.

And when we got to Marsdale Crater? *Nothing.* The broadcast power beam I'd risked my life to calibrate was spot-on target.

This Private Joshua Osamaki—one of Alcala's military brats—was tracking the status of the power beam from way back at Lowell. He actually apologized, like it was his fault the beam was working. And me, I was so scared and frustrated and pissed-off, I went along with him and wouldn't let him off the hook for it.

"What do you care?" I demanded. "You can sit there in your chair back at

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Lowell while Alcala and I are out here fighting for our lives. You need to see something? No problem, just put on your VR helmet and fly one of those remote viewers around the power tower a few times. We have to be here. The stuff I do can't be done by VR. I hope you . . ."

And so on.

Alcala looked on in an interested way as I berated her Private Osamaki. After another moment of this, she pulled her mic away from her throat for a private word just between us. She asked me if I felt better for yelling at the kid. I had to admit that, yeah, I felt a little better.

—A little smile here, as if she were genuinely interested in my mental comfort level. Then she slipped her mic back in place and assured her young man that I was just another asshole from the physics group, not to worry about me.

"Thanks," I said as she signed off.

"Least I could do," she replied. "You're going to be working with him. He's Gallen's replacement."

I realized I was wrong about Mexican girls. They know plenty about irony.

Things were quiet between myself and young Private Osamaki. You could say things were "business-like."

We apologized to each other—I apologized, really. No big deal. Apologizing to people was something I'd learned how to do over time. Osamaki was correct and military. He told me not to worry about it.

Osamaki and I teamed up on the laser defraction gate that arced the power beam over Pluto's shortened horizon line. It was big and important, and one of the few things we could do while the power beam was still working.

Osamaki operated one of the tower's remote viewing platforms from his chair back at Lowell. There was a thin split in the south wall of Marsdale Crater that the beam was supposed to pass through on its way down to Lowell.

Osamaki hovered here while I adjusted each of the 18 lasers that made up the defraction gate. Each time the beam twitched, he let me know.

While Osamaki and I bonded, Alcala flew our GEV in a series of slow passes over the terrain surrounding the tower. She was looking for cryonic geyser channels. She thought maybe shifts in the ice were throwing the beam off-target.

After an hour, she hadn't found any hollow points in the ice below us. She was starting to get nervous about our safety. We could barely see the ground in this blizzard. She didn't know the terrain well, and didn't want to fly under a hundred meters in this visibility.

"We could leave," I suggested, though Alcala and I both knew the power beam would drift off again just as soon as we lifted off.

She put my new-found friend, Joshua Osamaki, in charge of the ground inspection. We retired to a rock ledge just down from the crater rim. From there, we watched Osmaki's VR platform purr across the sleet-blown ice below us and prayed for something to happen.

"I hate the cold," Alcala lamented to herself. "I haven't been warm in fourteen months."

I had to admit, she didn't seem the sort to volunteer for a place like Lowell.

"Army gave me one of two choices," she said. "Pluto or Brownsville, Texas."

"The bastards."

"I was into it, actually." She sounded amazed by this now. "Pluto sounded

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

so exotic. Fourteen years in hyper-sleep each way. I thought of going back home to East LA, still all young and beautiful, you know—seeing all my little bratty *chica* girlfriends having grandchildren . . ." Alcala sighed a rueful sigh. Must have seemed like a swell idea at the time.

The radio whistled. We both jumped.

Pavel Mortensen was checking up on our progress. I should have known. We'd been on-point a couple of hours. Mortensen would be restive by now.

"What's happening with, ahh, the power reflector?"

If I'd been alone, he would have asked about "his" power reflector. Mortensen talked about everything on Pluto in a proprietary way.

Alcala flashed me a look that said, *"Watch this,"* and proceeded with a five minute dissertation on searching for cryonic geyser channels with VR. Give her credit. She shut him up.

"That's very interesting," Mortensen agreed. And then, realizing he would get nowhere with her, he called my name.

I cringed. Pavel Mortensen believed in treating company with kid gloves—even the military, who he hated. He had no such compassion for his own staff.

I mouthed the words, "Tell him I'm not here."

Alcala tilted her head at me in aggravation, her eyes going, *"Right. I'll tell him you stepped out."* She handed me the headset, in case I wished to be chewed-out in private. Not that it made any difference in a tiny GEV cockpit.

"Redstone." Mortensen sounded jovial. Shit. "Tell me what the hell's going on with my power reflector."

Following Alcala's lead, I gave him a lecture about calibrating large-scale optical reflectors. Somehow, I lacked the flair for bullshit that Alcala's army experience lent her. Mortensen grew impatient.

"Basically, you're telling me you haven't found the problem yet."

Time to sweat. Time for innocuous promises that we were working as hard as we could.

Mortensen was having none of that.

"Neil." He hunched a little closer to the screen, as if bearing down on a mis-threaded screw. "You know what I usually tell people who let me down in a crucial task?"

This is what Mortensen told me my first week at Lowell: "No matter what you do, it's fourteen years back home. My good opinion of your work will be your only lifeline when you get there."

"Lieutenant Alcala and I are working on this problem as hard as we can." I knew I was repeating myself. I hoped I didn't sound like I was pleading. I saw Alcala sigh and look away.

Mortensen chuckled at my display. He waved his hand; he had things on his mind larger even than my humiliation.

"I'm not calling to put you under pressure," he said. "No. I'm calling to *release* you from pressure. I want you to know that no matter what happens to my power supply in the next twelve hours, I absolve you of any guilt or blame. I want you to know that."

I didn't know what to say, so I tried, "Thanks, Pavel."

"The non-result experiment is the crowning achievement of my career," he said. "I don't need your subservience. I need your best effort. Did you read the treatise I wrote after Private Gallen made his incredible discovery of life on Pluto? You read my theory on quantum cognizance?"

The jury was still out on that thing Ronny Gallen had brought back from

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Marsdale Crater. And that paper Mortensen had written was one of the spookiest things I'd ever read. Put on the spot, I could remember one single line: "Quantum physics is religion for the ironic mind." If he had pressed me, I couldn't even tell him what it referred to.

"Yes, Pavel. I read it."

"Then you have just the barest understanding how important this experiment is to my wife and me."

"Excuse me? Your wife?"

"The world is full of sick, sad people, Neil. People who missed their chance. People who never knew what hit them. They look to God for redemption because they have no one closer they can count on. They—"

The signal dropped out. I tried to dial it back in, caught a few words, slashed with static, and then Mortensen was gone.

"Probably magnetosphere wrap." Alcala said this quietly, almost to herself. Communications is a tricky business on Pluto. The magnetosphere twists around itself like a Klein bottle. We might get him back in a few minutes. We might be out of radio contact with Lowell for the rest of the time we were up here.

"Tell me one thing," she frowned, trying to frame her question in the most diplomatic way. "Mortensen's wife died seven years ago. Am I right about that?"

"She died in a bad landing on Triton. She was installing one of the detectors for Pavel Mortensen's non-result experiment."

Alcala nodded to herself. "Maybe he was speaking metaphorically when he referred to her," she suggested.

"Maybe he's just crazy," I said. Mortensen was gone. The Coward could be tough. The Coward could be sarcastic.

"Maybe." Alcala sounded uneasy, like she knew more about this than she really wanted to.

She pulled Ronny Gallen's computer out of her ground bag. "Sergeant Emerich came across this while he was packing Gallen's personal effects. You being his co-worker, we thought you might know what it meant."

I wondered if this was the real reason she'd flown me up here—she had some piece of the puzzle about Gallen's suicide. If I knew anything, she wanted to ensure she heard about it before Pavel Mortensen.

I opened the case. A snapshot and a couple of short note pages fell out. The picture showed the thing that Ronny Gallen had dug out of the ice.

Gallen's mollusk—*Molluska galleni,* as Pavel Mortensen had christened it—was small and translucent, with a sharp black fin running down its back. It looked like a shark's fin, but I knew from hearing Pavel Mortensen's dissertation on quantum chemistry and cryonic biology that it was probably some kind of radiator. (Yes, the problem with life on Pluto is not how to keep warm, but how to keep cold.)

Behind the photo were a couple of pages of notes from Mortensen's biology staff. They had gone over Gallen's discovery with resonance imagers. They'd found channels filled with superfluid helium—*some analog to blood,* the paper suggested, *transported by quantum capillary effects.*

I'd had lunch with Gallen a couple of hours before he locked himself in his room and blew out the back wall. He had brow-beaten me with all this stuff about self-replicating polymer chains at four kelvins. I knew he wasn't smart enough to figure all that out on his own. It was nice to finally know where he'd gotten it from.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Alcala nudged me to turn on Gallen's computer. I expected snapshots of alien artifacts embedded in the nitrogen snow. What I saw was a message in Morse code, from Ronny Gallen to Nikol Szérda.

FOUND LIFE ON PLUTO [STOP]
I AM FAMUS [STOP]
ANIMAL IS SMALL AND COLD [STOP]
HOPING YOU ARE SAME [STOP]
[END]

I wanted to know how Gallen planned to transmit his message when nobody had seen Szérda in a couple of Plutonian days.

Alcala waved her hand at that, as if clearing the air of an embarrassing odor.

"Gallen, that clever boots, piped his message through Nikol Szérda's subcutaneous rescue transponder."

She tapped the back of her head, just behind her right ear.

"I mean, it's a neat trick," she admitted. "Nobody else thought to do it. But, Jesus. His *rescue* transponder?" The misuse of government-issued life-saving equipment made her cringe.

Everybody on Pluto got one of these implants the first week we were here. They were supposed to make it easier for us to find each other in case of a major pressure blow-out.

Trust Ronny Gallen to come up with something really useful to do with his.

What was most important to Alcala was the time the message went out—12:37. Gallen had killed himself twenty minutes later.

"Something happened up here," she said. "Gallen came back from Marsdale Crater and killed himself. And before Gallen, Nikol Szérda turned off all his detection and communications gear and lit out for the western shore of the Tombaugh Ice Sea. I don't know what, but something happened."

I was compelled to point out that Pavel Mortensen had been up to Marsdale Crater himself. The station director had been up here several times before any of us.

"That was a couple of Plutonian months ago," she said. "Things were warmer then. The atmosphere was deeper. Whatever caused Gallen to kill himself might have been up in the Christy Range when Mortensen was out here. Maybe it only came down in the last few days, as the atmosphere up there started to freeze out."

I pointed out that Gallen had not mentioned anything dangerous. That only made Alcala sigh.

"Gallen wouldn't know danger if it set up an embassy in his butt and asked for diplomatic relations. I wish I could talk to Szérda, though. Szérda could fill us in on a few things."

Nikol Szérda was the third member of the power network repair crew. The only thing Szérda couldn't talk at length about was the family he had left behind on Triton. Otherwise, he was one of those guys who seemed to know a little bit about everything. He could build you a broadcast power network over sandwiches and coffee.

"We can find him," I said. "His blowout transponder is probably working—that's how Gallen sent his message."

A huge heave of wind crashed against the side of the car, rocking it on its undercarriage. We grabbed our seats and waited while the car decided whether or not it was going to take us down the side of the crater wall.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"Haven't felt the need to get anybody killed going after him. Not up till now anyway."

But I had a solution to that. We could send our own message out to Szérda, see what happened. We'd ping him, as Ronny Gallen had done. I knew enough Morse code to ask Szérda where he was.

This turned out to be a really bad idea.

Let me explain something about Pavel Mortensen's thesis on "quantum cognizance."

I was with Mortensen when he got his first look at Ronny Gallen's critter. I saw the look of awe on his face. I saw the waver in his fingers as he reached forward to touch the thing on the video monitor. Mortensen wept. He called it a religious experience.

Only later, when Mortensen came out with his abstract on quantum cognizance, did I realize how literally he meant that word, "religion."

Hidden in this dryly worded treatise was a quantum mechanical glimpse of redemption—an unsettling, Mortensen-sized redemption on the cheap. Redemption without acknowledgment of sin, without repentance, without grace.

This is where he came up with that annoying phrase, "quantum physics is religion for the ironic mind."

The sacrament in Mortensen's religion was a state of matter known as a Bose-Einstein condensate.

Matter undergoes a phase transition when frozen to just above absolute zero. Electrons and nuclei—normally hidden from the universe in a haze of probability—begin to slow down. But the universe has a sense of modesty. Just at the point that an atom's charms are about to be revealed as naked, individual particles, quantum uncertainty kicks in to hide them away again.

What precipitates out of the probability wave at this temperature is not one particle, but all of the most probable states in which a particle might appear.

Mortensen's theory on quantum cognizance proposed a brain architecture built from some sort of Bose-Einstein condensate, frozen down till the molecules of the brain were smeared by quantum uncertainty into this "superposition of states."

Think about this a minute: A brain—*a consciousness*—aware of itself in all of its potential states. How would a superpositioned being see the world?

To the man who had lost his wife trying to prove the world exists only in the shape it is perceived, this was the only question that mattered. Everything leading up to it was just science.

Without letting go any of his worldly gain, Pavel Mortensen could look over Jordan, and see his wife Patricia on the other shore.

But Mortensen's thesis on quantum cognizance stopped short. It dealt only with how a superpositioned observer would see the world. He had not considered how his observer would affect everything that came under its gaze.

The Copenhagen Interpretation of wave mechanics requires an observer to be present before a probability wave can collapse into a single particle in a single ultimate state.

What if that observer existed in a superpositioned state? Would it be blind to the particle in its ultimate state, but see the sum-over-history of all the possible states that had led up to it?

What would happen if a human being were illuminated by a superposi-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

tioned observer? Would that person see the sum-over-history of all the possible outcomes their life might have held up to that moment?

This was ridiculous, of course. Just a quantum physics goof.

I think I was telling myself these very words as I typed in Nikol Szérda's transponder address, and hit the <enter> key on Gallen's transmitter.

And my world transformed.

I was borne to this point in my life on the wings of a million decisions. At each juncture, I saw a world go on as I might have lived it. Some places were distant, muted by time and intervening possibilities. Some were all but drowned out by interference patterns.

Some were as immediate as the cold prickle of my skin in the freezing air of the cabin.

I saw myself working on a full professorship at Tycho College, grimly. I was supposed to be finishing midterm exams. In fact, I was staring off into space. I was wondering what would have happened if I'd introduced myself to the reddish-blonde kid with the serious expression, the one who had monitored my class so many years before.

Would we be curled up in a bed right now? Would we be cozy and funky from a night of sex? Would we be talking?

I saw myself married to Robin. She sat across the room from me. She pretended to read, I pretended to proof some newsletter for the physics department at Tycho.

Ohh, God I wanted to stay. Here was the world I had dreamed of. Here was my second chance. So what if Robin and I avoided each other's eyes? So what if I could still feel the embarrassment of our most recent fight? I knew I could make things right between us. I just *knew* it.

But more than that, I knew we were not supposed to be here. Somewhere nearby, Nikol Szérda was warning me to get out now, or live in these myriad worlds forever.

I slammed my computer's reset button. The connection broke. I wiped at my eyes before Alcala could see me like this. But I hadn't had time to shed tears. The effect had lasted for maybe half a second. It only seemed like forever.

How much longer was Private Gallen's message to Nikol Szérda? Maybe ten, fifteen seconds? Long enough. Once he recognized the world that had always been there, he could never look away from it again.

Alcala and I had been lucky indeed.

Alcala's eyes fluttered as if she'd been startled awake. She gulped at breath, as if she only gradually realized she had air enough to breathe.

I put out a hand to her. I asked if she were all right.

"We—*crashed* . . . somewhere." She cast a mistrustful look at the walls between us and Pluto's tenuous atmosphere.

I knew what she had seen. I had seen Alcala and myself in a darkened ship piled up at the bottom of the Marsdale power tower, staring at each other in horror as the air whistled out through a broken seam.

I started to apologize. I'd done a terrible and foolish thing, intruding on Nikol Szérda's superpositioned consciousness. I had risked infecting us with the same quantum consciousness that had illuminated Gallen.

Alcala gave me a pointed look. "You knew this would happen?"

"Well, no. I was just thinking it through . . ."

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"Thinking it *through?* The hell's the matter with you, 'thinking it through'?"

She slugged me. Martial arts master that she was, her punch was calculated to sibling-size—that is, *hard,* with intent to maim.

"Dammit," I said, shaking out my shoulder.

"We could've ended up like Szérda. We could have ended up like Ronny. We could've ended up worse than killed."

I got mad and pointed out that we could have done nothing, too. Let all the lights blink out at Lowell.

Silence to that one. She snapped her gum in a thoughtful way. She seemed as surprised at the punch as I was, and not entirely sure what to do now.

I wasn't all that angry, to tell the truth. I figured she was afraid. I understood fear. Most of the really angry things I'd ever done were to keep anyone from looking too close at my eyes.

We both squirmed a little. I was wondering if she would apologize to me, or the other way around.

Neither of us ever got to find out.

Frost-white light blew through the forward canopy. The light hurt so bad we both turned away. When I looked back, a fountain of burning gas was exploding into the black sky, banishing the stars, the sun, everything but the underbelly of Charon.

Arcing into that maelstrom was the beam from the broadcast power reflector, made visible by a trail of burning gas left in its wake. A rainbow bloomed at the tail-end of the beam, vivid as beetles' wings.

"This physics thing you're thinking through," Alcala winced against the light. She shaded her face with her palm for a better look. "Is this why the broadcast power beam is going off-target?"

Yes, I thought, maybe so. The same observer that could invade the sum-over-history of our lives could peer into a 1,500 gigawatt broadcast power beam. It could select and combine a photon's less-probable paths so that they no longer canceled each other out, and the aggregate beam no longer appeared "straight."

I would have given her the basic quantum mechanics 101 about wave functions, but Alcala was already giving me that look—the one that pretty women give to geeky guys trying to impress them. The one that says, louder than words can convey, *"Don't start with me."*

But this was more than me puffing myself up on the podium. Whatever was down there had illuminated Szérda, and through Szérda, Gallen. It would do the same to us.

I was guessing it could even reach back through the telemetry signal of the remote viewing platform that Joshua Osamaki had been flying around the base of the tower.

Because there it was, stuck nose-first into the snow, as if he had simply stepped away from it and let it crash.

Alcala followed my gaze out the window. She asked me what that meant.

We both knew what it meant. It meant that the quantum plague was no longer confined to a couple of broadcast power mechanics out on the ice.

She called back to Lowell. Nobody answered. Not Joshua Osamaki in Engineering, not Sergeant Emerich. Nobody.

She started warming up the GEV to return to Lowell.

We were more scared of whatever was in the snow beneath us then we were of being shredded to pieces by the wind. We climbed straight up to two

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

thousand meters—right out of the protective shadow of Mount Christy and into the full fury of the storm.

Lowell Base was desolate when we returned. Gantries loomed up dangerously from the dark. Wind-whipped nitrogen snow from the Tombaugh Ice Sea collected on the west-facing side of the main dome. Someone, I realized, must have turned off the de-icers to save power. A very stupid thing to do on Pluto in the autumn.

The air temperature inside the base had been allowed to drift into the mid-40s. I couldn't believe Pavel Mortensen would let the place that he'd fought so hard to establish go like this. But Pavel was onto other things. He was hot on the trail of Salvation.

We found him in his office, a hulking presence in the iodine-colored glimmer. Wreaths of fog exploded into the bitterly cold air around him. He was muttering to himself as he worked over a 3D logic diagram of his experiment.

I knew who he was talking to. He was talking to his wife, Patricia. He was promising her a new man when next they met. He had seen himself in a new light. He had seen the man he might have been.

Nor was she exempt from his judgment. Together, they had been cruel and ambitious, but he would show her a better way when he saw her.

Normal circumstances, I would have coughed or made myself known somehow. But normal circumstances had not applied at Lowell Base in a very long time.

I said, "You know we can't stay here, Pavel."

Mortensen paid no attention to my intrusion. He barely looked up at me.

"You go on ahead," like he was planning to follow later.

He was plugging in a tiny laser at the edge of his desk. I presumed this represented the launch point for his signal, the island of Kauai, Hawaii, on Earth.

Further out across the desk: a scattering of prisms and beam splitters. Each was tagged with the name of a moon or asteroid somewhere between Earth and Pluto, where the signal might or might not be recorded, the probability wave might or might not collapse into an event.

Mauritius Renninger's original non-result experiment had proposed just two scintillators to record the random firing of a particle. The purpose of his experiment was to show how an informed observer could cause the particle's wave function to collapse, even if the observer never actually saw the particle hit the target.

Mortensen had seized on Renninger's original thought experiment as a way to extract information from a standing probability wave.

He added a dozen detectors, scattered throughout the solar system. Each new detector added to the resilience of the probability wave by making an exact determination of its final state that much more difficult.

And, if that weren't enough, the final receiving antenna out here on Pluto was supposed to be hooked up to a quantum computer, programmed to reveal only that a result had come in, but not from where.

All told? Ten years of Mortensen's life, to design the experiment, obtain the use of all the deep space platforms, fly out testing equipment to Ganymede and Triton. That wasn't even counting the death of his wife.

And it all came to nothing if Lowell was uninhabited this evening, when the signal arrived.

"We can do this from Arc Light," I suggested.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Mortensen just shook his head. "There are some recent changes to the experiment you were not informed of," he said. "It will not be possible to proceed from Arc Light."

Alcala didn't know the history of Mortensen's experiment as I did. She wasn't interested in the scientific novelty of a standing probability wave.

"Tell me what happened to Sergeant Emerich," she demanded. "He was supposed to stay here till the last of the civilian crew got out. Do you know where he went?"

"Sergeant Emerich went up to the Mount Christy District on a little errand," he said.

"A little errand. You're going to have to explain what that means, 'a little errand.'"

"Has Redstone here explained to you my theories on cryonic zoology and quantum cognizance?"

Alcala looked to me for a reading on Pavel Mortensen's bullshit quotient. I nodded to her: do it.

She laid him out across the model on his desk, spilling tiny gallium-nitride lasers and prism glass across the floor. She hauled him up by his collar to within an inch of her face.

Mortensen, in his new magnanimous guise, forgave her transgression against his body space. I didn't quite catch whatever second lieutenant Alcala said in response. I doubt it did anything for her chances of ever making first lieutenant. But it did wonders for Pavel Mortensen's attitude.

Mortensen became quiet. Alcala was looking in his eyes, and he couldn't shake her gaze.

"I can rescue Nikol Szérda from his superpositioned state," Mortensen explained. "I can rescue your communications staff too. But I need one of the beings that observed them. Sergeant Emerich went to retrieve a superpositioned observer."

Alcala looked at me to tell her this was bullshit. I knew what she was thinking. She was thinking, "collar bone? or knee cap?"

"Wait," Mortensen screeched. "This is all part of my plan. I can show you!"

He actually had a folder dedicated to his superpositioned observer. It was in his bookcase, next to the folder marked M. Galleni. A label had been fixed above the shelf: CREATURES OF THE ICE FOREST.

All the other volumes had been cleared from that shelf, presumably to make room for more creatures of the ice forest, as they came to Mortensen's attention.

Mortensen opened the folder to an animated diagram of something like the root of a crystalline tree.

"It's beautiful, isn't it? It's hardly even an animal, according to terrestrial biology. It doesn't even exist as a solid entity. It's more like a list of nuclear instructions that replicates itself over and over again, using the snow that it moves through for building materials.

"How do you even know it's out there?"

"Let's forego the complications for now. Let's just say that it fulfills a niche we believe exists, based on our study of the creature brought in by Private Gallen."

It moved as we watched, extending a million pseudopod tendrils and then filling in behind them. I had this eerie chill down the back of my neck that had nothing to do with the freezing air; if Mortensen was right, this was not some animal from the frozen veldt. This was an "informed observer." I realized I was watching a Plutonian.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Alcala was somewhat less engrossed. "This is the thing you sent Sergeant Emerich to get?"

"If, as I believe, each creature is an individual member of a single quantum system, we may be able to introduce decoherence into the entire system by acting on any member of that system. I have an ion trap in the physics lab, with a laser array. We can introduce disorder into the system that this creature and everyone it has come in contact with seems to share."

"How is Sergeant Emerich going to find the creature that illuminated Nikol Szérda? He's going to check for I.D.?"

"We don't even need the exact specimen that illuminated Szérda. Any observer in the same quantum state will do. They merely have to share the same spacial Bell inequality."

Alcala didn't much care about spacial Bell inequalities. She had only one concern. "What time did Sergeant Emerich leave?"

"He left just after the Engineering section shut down communications with us. That would have been, what? 1100?"

"Have you heard from him since?"

Mortensen looked annoyed. How was Sergeant Emerich's well-being his responsibility?

"We have a standard procedure to check in every two hours," Alcala said. "Has Emerich checked in since 1100?"

Mortensen had to admit, no, he had not.

Alcala looked heartsick. Sergeant Emerich was already two hours overdue.

"I'll go," I told her.

"No. You stay here. Keep an eye on Mortensen." She raised her eyes to address the moody shadow in the corner.

"Take my advice about military justice, *pendejo,*" she said. "Get your story ready. You may be big on forgiveness, but the IG at Trans-Jupiter Command is not. If you've killed any of my people, they're going to want to talk to you."

Mortensen made some defiant noise. Alcala and I swaggered all the way out to the corridor. We had faced down the nastiest man in the Big Planets. We were hombres.

Just beyond the door, Alcala sagged against the wall. I heard her swearing to herself in Spanish—a personal pep talk, I realized. She was getting ready to do something that frightened her.

"Sergeant Emerich would be so mad at me for doing this," she said quietly. She cast a fretful look down the hall as if she could see him shaking his finger at her.

"You're not going after him, are you?"

Stupid question; of course she was going after him.

"He tells me not to risk myself when I can send someone out instead of me. I'm always embarrassed, you know? I feel like a little princess or something. Now look what's happened. I fly you up to Marsdale Crater and leave Emerich behind to do something really hard. I don't think."

For the record, I would have died flying up to Marsdale Crater on my own. Alcala saved my life. Somehow, though, this didn't seem the right moment to thank her for that.

"He's a sergeant," I said. "How can he yell at you?"

"He yells at the personnel. With me, he gets quiet. He calls me 'Lieutenant Alcala.' Real formal, in that tone of voice my father used to take when he'd catch me and my sister fighting in the yard. And he tells me I don't think."

She pounded her forehead with her fist. Damn, damn, *damn.*

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

I knew what Alcala was going to do. She was going to follow Emerich up to the Christy Range and dig one of these things out of the snow. She was going to become illuminated in the process, and try to make it back to Lowell in a superpositioned state.

"You can send somebody," I told her.

"Who am I going to send? Everyone else is either in quarantine or in transit to Arc Light."

She was trying to lock her right gauntlet in place. It wouldn't come. I reached over to help her. She was trembling, so hard I could feel her shaking through her body armor.

"Look at me," she laughed. I could hear the fear in her throat. "Fourteen months since I landed here and this is the first time I really had to do something scary."

"I'll go. I can find this thing as easily as you can. I'll use the on-board auto pilot to fly back."

She looked at me. Alcala was no hero. She did not want to die. "Will that work? Even in a superpositioned state?"

God, she sounded so hopeful.

"Sure," I said with all the confidence I could put in the word. Alcala knew better. She didn't even bother calling me a liar.

"I'll be all right," she said. "I just need to get some of that stuff out of my mind. Up at Marsdale, I looked out at a million worlds and all I saw was how I died. I just—I need a few minutes, that's all."

Alcala would never make it back like this. I could see her trying to get back to Lowell in a superpositioned state, lunging at reverberations of worlds, doubting herself, her judgment, her eyes. She'd never make it past the southern wall of Marsdale Crater.

I put my arms around her. She started to shrug me off. She thought I was being comforting. But I had something to tell her, and I couldn't bear for her to see my face.

"What if you'd looked out at the million worlds around you and seen how you might have lived? If only you'd done something hard with your life. If only you'd told the department head to fuck off when he called you stupid to your face. If only you'd told your wife how much you loved her, instead of how she had to do what was best for herself. Some people are illuminated . . ."

Some people are illuminated, Lieutenant Alcala, and see things a lot worse than dying.

I looked up to see her black eyes on my face, as silent and impassive as a sniper's.

"You wish sometimes you would've stood up a little more?"

"Me? No. I'm no coward. Maybe. A few."

"Anybody die?" The soldier's question.

"Only me." I thought she would laugh; it was meant as a joke.

She started to say something, then changed her mind. She ducked her eyes.

"Sorry about your shoulder," she said at last. "I shouldn't have done that."

"My shoulder's all right." My shoulder felt like it had been pinned to my spine with a metal spike.

She gave it a rub. "Sorry."

We made some show of synchronizing our watches. Mortensen's signal was coming in by 2200. If Alcala wasn't back by 2200, I would contact her unit. They'd be settled in at Arc Light by then. I would contact them and tell

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

them—what? She didn't want anyone coming after her. That would only make things worse.

"Just don't worry about it," she said. " 'Cause I'll be back by then anyway. Sergeant Emerich gets back while I'm gone, tell him to stay here. Tell him that Danielle said to arrest Mortensen and keep him away from communications equipment until this signal of his is out past the Kuiper Belt. Tell him—" She looked at me suddenly. "What?"

"Nothing."

She turned her head at me, curious. "What's so funny?"

Nothing was funny. I was thinking that "Danielle" seemed a rather decorous appellation for God's own GEV pilot. I could only guess what I must have looked like that she should ask.

-"You seem like you'd be a Dani," I said.

She smiled. She had this goofy grin that swept out to either side of her nose like the wake off an ice breaker. Hers was not a classic beauty. "Don't let the army stuff fool you. I paint my toenails like everybody else." She frowned, a little suspicious. "Are we on a first name basis, Neil?"

"I can't keep calling you 'Lieutenant.'"

She nodded to herself. She could see the logic of that.

I watched her lock her helmet down and step into the airlock. Strange, the sort of people you get protective toward. Danielle Alcala could cripple me with her thumb. Here I was, worried sick for her.

I told myself that Danielle Alcala was smart and cautious. She was God's own GEV pilot. If Danielle Alcala couldn't make it back from Marsdale Crater, then nobody could.

But Danielle didn't come back.

She did well, actually. She got further than anybody else could have. I believe she would have made it if she had not been illuminated.

The last time we talked, she was settling down along a fork of the Great Bose River, a mighty torrent of liquid helium, maybe ten centimeters deep, that runs uphill through the foothills of Mount Christy.

She'd found something on one of her resonance imagers. She thought it looked promising. Then she turned off her communications gear, in case she was illuminated on the way down, and dropped below radar range.

She was back on my screen fifteen minutes later, but something was wrong. I could tell she had been illuminated just by the track on the screen. I could see she was struggling.

The car drifted south, then east. I remember shouting directions over the radio—a foolish thing to do as she'd turned her radio off before descending into the basin.

Her GEV lost altitude. It disappeared into the radar shadow of Buie Pass, then rose for awhile before drifting into an artifact from the primordial solar system that we named 34-40, after its map quadrant.

This 34-40 was a column of rock and ice standing guard at the entrance of Buie Pass, the core of a mountain of rock and ice that had, as mountains on Pluto tend to do, evaporated over time.

Call it a stalagmite now. It wasn't formed like a stalagmite, but it looked like a stalagmite. Fifteen stories tall. With a little ground effects vehicle pasted to the bottom of it.

I went back to Mortensen's office. I wasn't sure what to do.

No, that's not true. I wanted to beat the shit out of him. But he knew about

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

these superpositioned observers. Maybe he knew enough to keep me alive when I went after Danielle. Say that I was torn between duty and desire.

Mortensen was gone.

I called to him over the common base channel. I paged him over the intercom. I searched for him down in the labs. I even tapped out a message to him in Morse code, from my palm-top computer to his blow-out transponder, the way Ronny Gallen had done with Nikol Szérda.

Mortensen saw no reason to respond.

Rage, the coward's last friend, took me by the arm. I hauled back my palm-top computer and aimed for Mortensen's sanctimonious smile in the portrait behind his glass-littered desk.

Only an insistent light on the butt-end of the little computer kept me from splattering it across Mortensen's face: I had V-mail.

I was swearing as I opened my V-mail browser. I was expecting Mortensen. I figured he had been overcome by guilt at sending me up in the storm alone.

But it was not Mortensen, and the message did not offer me any particular salvation.

An adolescent boy stood in the frame. He had that expression that all kids have in family albums. That is, he looked like a hostage in a ransom photo.

I knew him. He was Nikol Szérda's son, Stephen.

Szérda didn't talk much about his family. He drank his way out of their lives over the course of twelve years. On those occasions he did speak of them, he spoke in the past tense as if they were dead.

This was not to say they weren't in Szérda's heart every day. He had described his son so well that I knew him on sight.

The boy held up a sign. The sign read:

"Pavel Mortensen's non-result experiment is a threat to life on Earth."

The boy squirmed. "You promised my friends will never see this," he reminded the person off-camera.

"Your friends would never know what this meant even if they did see it." Szérda's voice sounded preoccupied and weary.

"They'd know it meant I was a dork. I don't see why I have to do this anyway."

"I told you. My friend's in trouble. He may not have a lot of power in his palm-top computer. He may not have audio."

"Dad, couldn't we—"

"Flip the sign, Steve."

He turned the card over. The back read,

"Quantum plague breaks out at the George Smoot Astrophysics Facility on Kauai, Hawaii—"

The album ran out of memory at that point. No matter. I'd seen enough.

I sat on the edge of Mortensen's desk, as the whole huge picture of what was about to happen fell in on me.

Pavel Mortensen had figured out Ronny Gallen's trick of broadcasting messages through our blow-out transponders.

When he had first conceived of his non-result experiment, Mortensen had counted on a quantum computer to record the signal coming in from Hawaii. Now he had something infinitely more interesting. He had Nikol Szérda, the first superpositioned human.

Szérda, wherever he was, had iterations of himself living in worlds where this had happened. He was sending me a warning from one of those worlds.

Quantum plague was about to be vectored along this beam of light to every

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

observation post in its path, right back to its launch point on the island of Kauai, on Earth.

The trip up to 34-40 was terrifying. Two hours gripping my chair arms as the tiny craft bucked and ploughed into the teeth of the autumn gale. Two hours of dodging hydrocarbon plumes from cryonic volcanoes. Two hours of squinting my eyes to make out the glint of starlight against crystalline ice buttes left behind when the sintered nitrogen of some ancient frozen lake had evaporated into space.

I had to force myself to look down at the column of ice and stone just inside Buie Pass.

I found her wreckage scattered across the crater floor in a two hundred meter smear. I was hopeful at first. Even though the crash had been sudden and violent, the cab appeared to be intact.

I set down and hunted for her with a flashlight and a transponder. I got a signal from her, but it was indistinct and hard to pin down. She might have been under the wreckage. She might have walked away, but I'd never find her tracks in this blizzard.

I took a deep breath and tried her blowout transponder. I figured she had been illuminated when she set down at Mount Christy. If she'd been alive to hear my ping, my world would have exploded in to a million timelines.

I opened my eyes. The wind was blowing. The wreckage was flapping and waving. Methane and nitrogen snows blew off the peak of Mount Christy. That was all.

I kicked everything in the cab to pieces. I wept and swore and kicked the side of Alcala's vehicle. It rocked slightly. As it resettled itself, a little metal canister fell from an outside storage compartment.

I crept up on it slowly. The top had come unsealed during the crash. The contents of the canister had mingled with the snow.

The observer wasn't much to look at up close. A patch of snow that reflected starlight a little differently than the rest of the snow around it. Mortensen had likened it in his notes to the wave energy that animates a tsunami—at once separate and integral to the medium through which it moves.

I thought of the faint rose heart in a block of quartz. Something was in there. But I could cut through the center of it and never see a thing.

I saw a shadow on the ground. I whirled around.

Danielle stood over me with a rail gun in her hand. She was saying something. Her eyes were steady along the ridge above us, active and watchful.

I started to reach for her. And then I saw her leaning away from the GEV. And up in the cab, with her helmet off. And down on one knee watching the quantum observer move through the snow.

I realized I had been illuminated by the thing in my shovel.

I closed my eyes against the onrush of worlds—a foolish thing to do. This was hardly a visual experience and shutting my eyes would not keep it out.

I saw Robin again. I opened my eyes on the same tense and loveless living room I had seen before.

Poor Neil Redstone. I could look in on him with the same detached sympathy you feel for the kid you see in old family holographs.

Poor Neil Redstone, fretting about how he might have made things right, if only he'd had a little more courage, or a little more patience, or a little more *something*.

I found myself drinking coffee with Nikol Szérda. I had tracked him down

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

through his blowout transponder to a tiny weather station 15 klicks down the coast from Lowell. It didn't matter that I had become illuminated catching up with him. We were old friends now.

Szérda had grown a yellow-white beard since the last time I'd seen him. Otherwise he seemed more or less normal, though he did tend to shimmer a bit around the edges.

I realized I wasn't in the room with a real person so much as a focal point, a most probable location where Szérda should be. He would see me the same way.

He was showing me all the pictures and V-mail that he had sent back to himself from his home in a million alternate timelines.

Pictures of his wife, Honey. Pictures of his son and daughter. Birthdays that he had never enjoyed with anyone in this timeline were extravaganzas elsewhere. Grandchildren, wifely hugs, lots of balloons and music.

He wanted to know all about Robin. When I didn't want to talk, he nodded in an understanding way; for all that he missed his family, he understood that some things just aren't what we remember them to be.

A little closer to this timeline, I was drinking coffee in the galley at Lowell with Pavel Mortensen. Danielle was alive. I was waiting for her to return from Buie Pass.

Mortensen was angry and sulking. His signal was not arriving in this timeline till 2550. Somehow, Danielle and I had figured out what was going on. She had taken the three hour warning to turn all of the big antennae at the Marsdale platform away from the Earth.

And then I was back by Danielle's shattered vehicle. She watched the ridge behind us for threats.

I reached up a hand to her. She shimmered like a mirage on a desert highway and then popped out of existence as the wave function that held her collapsed between us.

I hated the thing in the shovel for dangling her in front of me like this. I was careful as I scooped it up not to disturb the snow around it, in case this might serve as some sort of warning. I wasn't sure what Mortensen's array of fifty nanometer lasers would do to the little bastard, but I figured it would hurt.

A yellow GEV was sitting in the yard as I circled into Lowell. I called down, hoping that somehow Danielle would answer.

Mortensen answered. He was so proud of himself. Szérda had shown up unexpectedly to await my return, and Mortensen had willingly infected himself with the quantum plague to bring the old man inside.

His arrogant smile couldn't be hidden under the shimmer of alternate timelines. He would show me what a man with a well-developed sense of destiny could endure.

Mortensen showed me where to insert the canister into his system of ion traps and lasers. Then he pushed me away.

He had calculated the frequencies and energy levels necessary to rupture the quantum world that bound us. He didn't need any help with that. And he sure didn't need some potential usurper looking over his shoulder.

No matter. I didn't need to watch this to know what was happening. I felt the first laser go into the observer—we were part of the same quantum system after all, just like Mortensen predicted.

The emotions I realized in that first rush were hardly the blind animal surges of fear or rage. They were supple and complex. They were playful—

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

the joy of a being who would reach into a 1,500 gigawatt broadcast power beam for the curiosity of seeing what was in there, bending it for the pleasure of seeing something big and powerful turn to its whim.

They held self-awareness; even at the moment of destruction, they were intrigued at the people that were stressing it to the breaking point.

I felt the observer reach back down the complex conjugate wave and probe into my heart, and I felt its surprise to discover I was not an animal.

Mortensen re-polarized the light and sent it through the condensate again.

I felt the observer curl up. I felt the delicate sensibility fragment. I felt the animal roar drown the rational inquiry.

The superpositioned world was fading even as I snatched at it, like a moody dream in the light of dawn.

Even without opening my eyes, I knew the vestigial worlds I'd half-inhabited had split away into eternity. Danielle was gone forever. The superpositioned worlds where she still lived were gone. All that remained was to find her body.

I heard a whoop of joy go up from somewhere, way at the other end of the base—Joshua and his buddies, free at last.

Mortensen was effusive. He clapped Szérda and me on our shoulders like we were a crowd of old friends at a bar. "I told you I'd bring you back," he said. "I told you, didn't I?"

Szérda could only smile at the attention. He seemed breathless and lost. "Did you see my son?" he asked me. "You got my V-mail message. Did you see Stephen?"

Mortensen, who had never seen Szérda's V-mail message, squeezed his arm and told him what a great kid Stephen was.

"You're going to be back with Stephen real soon," Mortensen assured him. "Things were a little out of control for awhile there, but I've got it figured out now. In a little while, every human being will have access to their own best-possible world."

He went back to check the scintillator at the top of his laser array. I watched him. I could see by his face that he was already seeing flashes, as the creature inside struggled to draw itself back together.

"We've got to talk," I said.

"No time," Mortensen apologized. "The signal from Kauai is due here in less than two hours. I've got to hook the receiving network into one of these room monitors here, and then I've got to chase you all out of here so that I have a few minutes alone with the observer in the tank."

He rested his palms on either side of the ion trap. "You might as well be the first to know." He spoke in a confiding tone. He looked like a sprinter waiting in the blocks. "I've decided to allow myself to be re-illuminated. I will record the signal from Kauai in a superpositioned state."

He never even thought to lie about his intentions. Here he was, preparing to send his quantum plague to Earth, and he never even considered anyone would stop him.

He pricked the thing in the trap with another laser. It lurched and sloshed like a muscle struck by a live wire. I cringed. I couldn't put that cool touch out of my mind—the condescending surprise as it slipped through layers of my memory and motivation until it realized that I too was a sentient being, and then the sadness that there would be no time for us to communicate.

"Damn it." I grabbed him away from the ion trap by his arm. "Leave the little fucker alone."

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The steel in my voice surprised both of us.

Mortensen stepped away from me. He shook his arm from my grip, and stood rubbing the bruises out.

"I'm sorry if this process seems cruel, but this won't work without the observers." He was in his reasonable mode now. He thought he was going to explain this for me and I would understand.

I grabbed the creature's little metal prison out of the ion trap. I figured everybody would be a lot better off if I just flew the observer back up to where Danielle Alcala had found it.

I made for the door. Mortensen called after me. Now it was my turn to ignore him. He demanded that I stop. He told me I was a man of stunted moral vision. He warned me once to put the observer down—one last time, he said.

A hole peeled open in the wall beside me. The molten metal nearly caught my leg. I could look through it and see the corridor beyond.

He turned his head toward me in a gesture of empathy. In his hand was a small laser. It was aimed at my stomach. He had this expression so full of sorrow and regret that I knew he'd already talked himself into killing me.

"You know," I said, "I liked you better as a self-serving prick." I looked for some place to set down the tank, away from Mortensen's reach. I could have taken him if I had my hands free.

"I don't know if you remember this or not," he said, "but I was the first one up to look at the broadcast power beam at Marsdale Crater. I went up the very first time it went off-target. I was illuminated, as you were. I was extremely fortunate—the being that illuminated me took flight into a parallel timeline and took our quantum connection with it. But in that moment of my illumination, I saw the people I had destroyed. I saw . . ." He shook his head. "I knew . . ."

He became silent. His face changed, just a little. The muscles relaxed in his cheeks. His eyes turned away, as if he were hearing some horrible rumor whispered in his ear.

"This is where I make amends for the things I've done," he said. "Please, Neil. You can't stop me now, not when I'm on the verge of my atonement."

He pushed the laser into my stomach, as a hedge against agnosticism. "Set down the canister," he said. "Please."

I had this curious feeling of superpositioning again. I could see a world where I laughed in his face and told him he didn't have the courage of a murderer. He blew my guts out in a thin stream that painted the back wall.

I could see a world where I wet my pants and begged him not to shoot. I could see me later on in that same world, sarcastic and knowing, with the perfect rejoinder, if only I'd thought of it while Mortensen had the gun on me.

I realized I was done living that way. For better or worse. I was done with cowardice.

"Your move," I said. "What are you going to do?"

I had his eye. I imagined I'd know the split second before he fired. I'd see the flinch as he squeezed down on the switch.

But some people don't have it in them for face-to-face murder. Mortensen didn't have it in him.

He turned the laser on his ion trap, put a hole in it from panel to panel. He snarled with frustration and rage. And then he did it again. After a few more shots, the diode cracked from the heat. He studied the gun a moment, his face fixed in this monkey-smile of fury.

"You know who I feel sorry for?" Mortensen tipped his head forward to give

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

me the deepest, most sincere gaze his tired eyes could bring forth. "The ones who talk a lot about love when all they've got the courage to give is sympathy. What do you think, Redstone? Will those people ever have what they want?"

"Decency is not cowardice."

"Tell that to Danielle Alcala," he said. "The next time you see her."

Mortensen whispered something in Nikol Szérda's ear. I could imagine what it was: See that man? You could be back with your wife and kids right now, but for him.

Szérda stood. His fists were doubled, but no harder than his face. I closed my eyes and waited. What was I going to do? Hit the poor bastard back?

The crash came as a surprise. I opened my eyes to see Mortensen sprawled across the floor. Szérda was grinning down at him, shaking the pain out of his knuckles.

"He's not the sophisticate that you and I are, Pavel, I'll give you that. Me and you, we don't let anything get between us and the things we crave." He pulled Mortensen up by the collar. "You ever say anything bad about Neil, or that little soldier girl again, I'll make you wish you were dead."

Szérda started talking as we closed in on the foothills of the Christy Range. Like someone had hit a switch, he told me about his son, who wanted to be an artist or a writer. He told me about his daughter, who could fix anything.

But his heart was reserved for one person.

"You saw my V-mail album," he said. "Did you see my wife? Did you see Honey?" His face held the sublime light of Lucifer, taking in his last view of Paradise.

I knew what he was getting ready to do. He was going to take the quantum observer back home. In the process, he would be re-illuminated. Maybe he would go home as well.

I could have told him he was sacrificing his life for a wave function, a set of—what did Mortensen call it?—self-replicating nuclear instructions? Who knows what it really thought? What it could do for you?

But Szérda was so hopeful. He had this aching smile, at once desperate and certain. I thought of a gambler putting his last nickel in a machine that he knows is going to pay off, because it just has to.

I said, "She's a beautiful woman all right."

He shook his head in wonder at why she'd settled for a guy like him. "After I started drinking heavy, Honey took over our water brokerage. Never said a word to anyone. Never complained. I'd come in after a couple days hiding out in some empty purification tank, tell her some story about how the power went out in my GEV so I couldn't even call her. She'd just put me to bed beside her, kiss my shoulder in the night, tell me how glad she was that I'd made it back."

We laughed together, like men do. "You must've been some kind of liar, she'd believe that every week."

"Ohh, I was a great liar," Szérda snickered. "Lying to this sweet woman who would've believed anything I told her just because she loved me." He looked away out the window, as if he were watching the landscape pass by. "Oh yeah," he whispered. "I could've been some kind of fucking superspy, couldn't I?"

The autumn gale got loud after that, too loud for either of us to speak. I wanted to forgive him for betraying his wife. I wanted to plead with him not

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

to die chasing ghosts through the Ice Forest. But we didn't have much time left, and the fate of the Earth weighed on every moment.

"Mortensen's watching every move we make," I said. "If either one of us is illuminated by this little guy, he's going to patch us into the signal coming in from Kauai, just like he was planning to do all along."

"I won't be out here that long," he said. "I promise."

"You could go back home," I said. "Try to make things right."

"Nothing back there anymore. Two angry young people who forgave all they could. A sad, gray old lady, beat up by loneliness." Szérda smiled. "I know how much time I've got till the signal comes in. You don't have to worry. I just want to spend a few minutes with my family."

The scintillator down in the cryonic holding tank was starting to record light flashes amid the snow; the Observer was waking up. Whatever ideas I harbored for a safe, humane way to dump the little guy were evaporating faster than he was.

Szérda knew. He smiled and slapped my shoulder. "It'll be all right," he promised me. He pointed at a spot along the banks of the Bose River. "When I'm out there, I'll mention your little soldier girl," he said. "Who knows? The little sucker owes us for saving its life."

"We don't even inhabit the same universe. I doubt it understands anything about paying debts," I said.

"You knew it was dying. How did you know that?"

"We don't live in a universe of gratitude and kindness," I said.

"That sounds like something Mortensen would say."

"Let's don't get nasty, all right?"

"Mortensen looks out at the universe and sees nothing but a food chain. What a sad man he must be."

"What if Mortensen's just being realistic?"

"Who knows? Maybe he is." Szérda laughed. "That makes us a couple of dumb fucks, then, don't it?"

He patted my shoulder and stepped into the airlock. I saw him walking down to the cliff-edge with the cryonic tank carrying the Observer in his hand.

He bent down right at the precipice and scratched something in the frost, a message for me to read after he was gone.

Then he eased himself over the ledge and out of sight.

I waited till I knew he was gone before I went out. He'd scrawled the names of his wife and children.

I might have seen something moving fast under the eaves of water ice that shored up the cliffs overlooking the Great Bose River.

Mortensen blared in my headset.

"What did you do to me?" he demanded. "What did you do to my signal? We could have changed the world, you and I. We could have liberated the human race from the tyranny of its own past. Yet you fought me all the way."

I was slow from the cold. His words didn't register with me right off. He was telling me he had missed his signal. Someone had turned the antenna at Marsdale Crater. Mortensen had presumed it was me.

"I'll check on it," I said.

"Check on it? You weak, frightened, morally corrupt little man. You lack the courage to even admit you turned my antenna, don't you."

"I'll check on it," I repeated.

"Who turned it if not you? There's no one alive out there but you. You can not evade history's judg—"

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

I switched him off so I could think. Who had turned the antenna if not me? Only one person I could think of.

It wasn't so far between Buie pass and the radio island in the center of Marsdale Crater. A couple of hours by foot maybe. A miserable couple of hours, but it might be survivable, now that we were free of our superpositioned states. If you followed a straight line, you might make it.

I followed a straight line, between Danielle Alcala's wreckage at the entrance to Buie Pass, and the cluster of domes ten kilometers away.

I saw the flash of color as I came up on the cluster of antenna domes in the center of the crater. It was bright, emergency red. It stood out against a slick of dirty pink methane ice like blood on pavement.

I settled down close to get a better look, and my heart caught up in my throat as the red blob defined itself into a space suit, doubled over on elbows and knees.

It'll be Emerich, I told myself. Emerich Emerich Emerich. No, it'll be Danielle. But she'll be dead. She's out of power, two hours ago. Don't even dare to hope.

Her eyes were open as I pulled her up from the ice. Her face was gray from the cold that had begun to seep past her suit's thermal barriers. I could see none of the scorched blackness of severe frostbite, but she was light as a feather as I picked her up. She didn't shiver. She was past shivering.

She whispered, "You never would have made it, *miho*."

I assured her that she was indeed one bad bitch.

"I saved the entire human race, didn't I?" Frozen nearly to death, she still seemed pleased with herself.

Danielle doesn't believe any of this superposition of states business for a second. I mean, she was illuminated as I was. She has to believe that part.

It's the long-term implications she doesn't trust.

Yes, she's seen the chronological map I pulled off of her wrist in the Lowell Base medical unit. Why does it now run three hours behind the watch on my wrist? She shrugs at that.

She can account for every moment, from the time we synchronized our watches to the moment she cranked the antenna around and saved the Earth from Mortensen's experiment. She figures I must have gotten confused when the Observer illuminated me beside the wreck of her GEV.

I know Mortensen would agree with her. He would tell me I was anthropomorphizing a blob of nitrogen snow, animated by a set of self-replicating nuclear instructions.

Of course, Mortensen isn't saying anything anymore. He took himself up to Marsdale Crater soon after the Big Planets Steering Committee decided that Pluto should be left to its previous tenants.

I presume he spent the rest of his life straining for the echoes of adulation coming in from alternate world lines, but that's hard to say. Nobody ever saw him again.

That frightened, courageous young woman who robbed him of his chance at immortality? She's somebody's mommy now, somebody's wife. On the couch at night, I rub her feet and she blinks herself awake and smiles at me.

She's a little older. We walk past a plate glass window, she can't help angling her butt up toward the reflection. She tsks to herself. She looks unhappy.

That sad, quiet young man grew a little older too, a little more comfortable.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

He turned into somebody's dad, a husband who reaches across the table and spears the last of his wife's dinner with his fork.

We have a little girl with black eyes and a pensive way of smiling and biting the tip of her finger at the same time.

(Her mother shakes her head at that—"She must have gotten that shyness from you, *esposo*.")

And a boy, just entering that croak-voiced stage. He looks like me—thin and pale with black hair. But he's got his mother's personality. He's a head-down, straight-forward littler gomer.

We talk about them as "the kittens"—as in "Schrödinger's Kittens," the legacy of a quantum paradox both alive and dead.

Gruesome? Danielle thinks it's funny. I'm not so sure. I laugh along, but I can't seem to shake this shadow from my heart.

Someday, about 160 years from now, the snow that fills Buie Pass will return to the sky over Mount Christy and Marsdale Crater. Everything beneath it will be revealed, including a couple of wrecked ground effects vehicles, a couple of space suits.

One of those space suits will belong to Sergeant Emerich. The other space suit is going to present some real problems for anybody trying to follow our family tree.

I could almost smile as I see my great-grandchildren's great-grandchildren, scratching their heads over the paradoxes of time and space, courage and kindness.

Except that the kindness that gave me Danielle is an alien kindness, with an alien sense of balance.

Somewhere nearby is a man who came back from Pluto alone. Whenever I feel him close, I crush Danielle to my chest like a bunch of flowers, and I fill my nose with the smell of her hair.

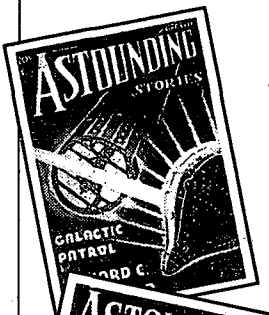
I whisper to the man in the Ice Forest—Neil, if you're out there, come sit by the fire. Warm yourself against the cold. O

READERS: If you are having problems finding *Asimov's Science Fiction* at your favorite retailer, we want to help. First let the store manager know that you want the store to carry *Asimov's*. Then send us a letter or postcard telling us the full name and address of the store (with street name and number, if possible). Write to us at: Asimov's Science Fiction, Dept. NS, 6 Prowitt St., Norwalk, CT 06855-1220. Thank you!

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ASTOUNDING SCIENCE FICTION

Collector's Series Trading Cards



Return to the origins of the science fiction genre with the complete collection of all 50 *Astounding Science Fiction* trading cards.

Each full-color card depicts a different classic cover from 1930's and 1940's issues of *Astounding Science Fiction*. Fascinating background information written by noted science fiction historian Bob Weinberg is also featured on every card.

Order this unique collector's item today!

SAVE 20%!

PENNY MARKETING

Dept. SM-100, 6 Prowitt Street, Norwalk, CT 06855-1220

☑ YES! Send me _____ *Astounding Science Fiction* trading card sets (DATRCD) for just $11.95 plus $3.50 shipping and handling each. I save 20% off the regular price. My payment of $ _____ ($15.45 per set, U.S. funds) is enclosed.

Name _____
(Please Print)

Address _____

City _____ State _____ ZIP _____

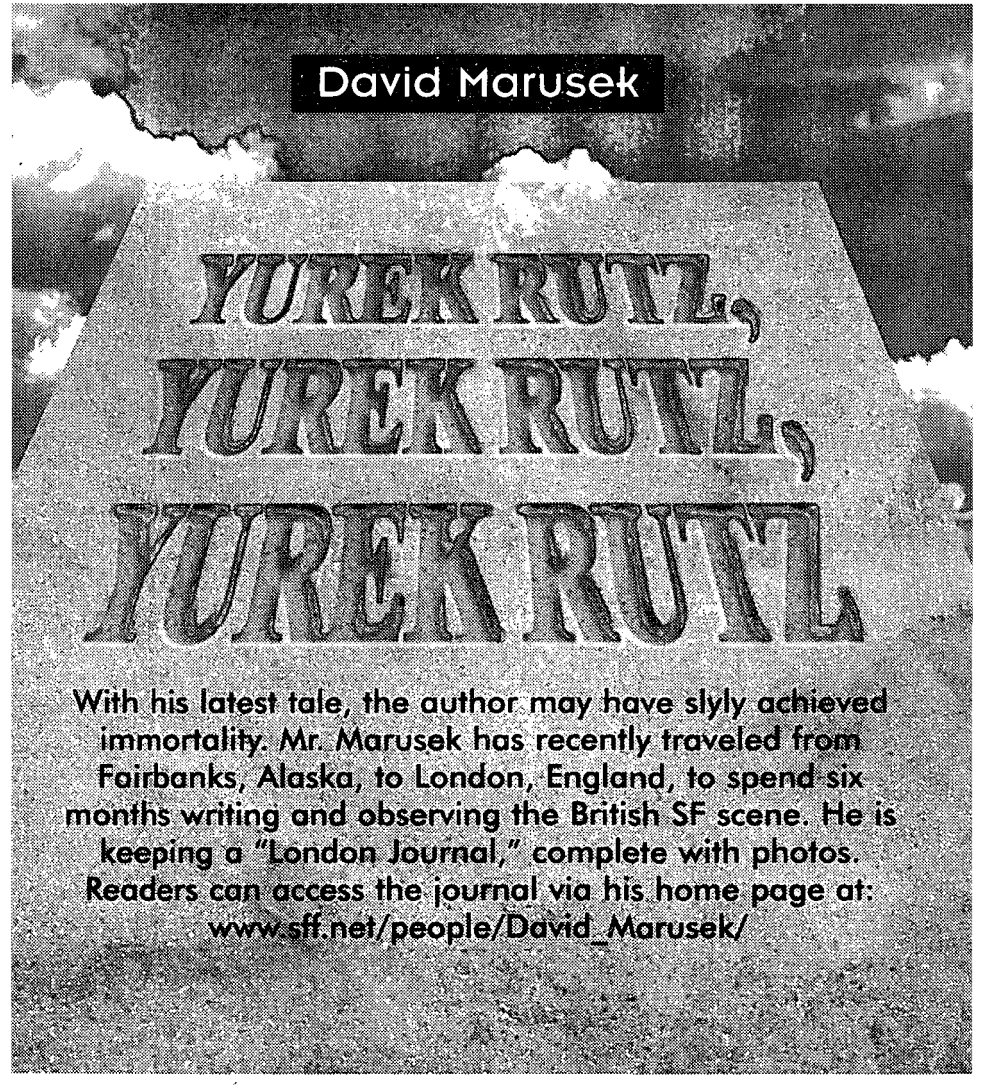
Make checks payable to Penny Marketing. Allow 8 weeks for delivery. Add $2 shipping and handling for delivery outside the U.S.A. ($17.45 total, U. S. funds). CT Residents: Pay $16.38 per set to include state sales tax. Offer expires 12/31/98. 068C-NSTCL2

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

David Marusek

YUREK RUTL, YUREK RUTL, YUREK RUTL

With his latest tale, the author may have slyly achieved immortality. Mr. Marusek has recently traveled from Fairbanks, Alaska, to London, England, to spend six months writing and observing the British SF scene. He is keeping a "London Journal," complete with photos. Readers can access the journal via his home page at: www.sff.net/people/David_Marusek/



January 21, 1999
Gardner Dozois, editor
Asimov's Science Fiction Magazine
1270 Avenue of the Americas
New York, New York 10020

Dear Mr. Dozois:

It is with grave misgivings that I write you this letter. You have been most kind to me thus far in my fledgling literary career. You have purchased my humble scratchings and showcased them in your esteemed publication. For this I am forever in your debt. Nevertheless, I feel compelled to inform you of recent dealings to which I have been party, and to pass along to you a certain questionable proposal.

Illustration by Shirley Chan

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

It all started last summer with a phone call I received from an elderly woman who resides here in Fairbanks, Alaska, my home town. She asked me if I was David Marusek, the author. This immediately put me on my guard, for although Fairbanks is a tiny, remote community where everyone feels duty-bound to mind everyone else's business, and although I have appeared in your esteemed publication on several occasions, no one here seems to know that I'm a writer. If people know me at all, it's as borough zoning code examiner—my day job. And as borough zoning code examiner, I am not well loved. People move to Alaska in the first place to escape pencil-necked bureaucrats like me, but here I am, authorized to tell them what they can and cannot build on their own private property.

Like many public officials, I maintain an unlisted phone number at home to cut down on angry late-night calls. Nevertheless, there's an English Lit professor at the community college who has my number, and he gives it out. He thinks it hilarious good fun to forward his own nutcase calls to me. His nutcases are less threatening than mine but no less annoying. You know the type, I'm sure: the stockbroker who has an inspiration for the next megablockbuster thriller but no time to "scribble," so for half the advance and royalties, he'll license his idea to me. Or the retired floor-covering salesman who wants me to ghost his vanity press autobiography, *To All My Darling Grandchildren.* There's no cash dollars in it, but it's a dandy opportunity for me to obtain "experience." And to sweeten the deal, out of the projected press run of one hundred copies, he'll let me keep two.

So when I got that call last summer, I sucked in my breath and said into the phone, "Yep, that's me, David Marusek, the author."

"Splendid," said my caller. "My name is Emma Rutz, and I have a commission for you. Can you stop by sometime this week?"

A commission, yah sure, I thought. "I'm sorry," I said, "but I'm very busy with my own projects. I doubt I can spare the time."

"Oh, this won't take any time at all," she said, "and of course I will compensate you handsomely."

At this point I should have politely hung up the phone, but curiosity got the better of me. "How handsomely?"

"Very handsomely. I want you to write the epitaph for my husband's grave marker."

I suppressed a laugh. Won't I ever learn? "Ummm," I said, "I'm a science fiction writer. I don't do gravestones. For a gravestone you need a poet. I have the home phone numbers of several good poets I could give you."

"No, no, you are just the man for the job. My husband specified you by name. He was a fan of yours, don't you know. And it was one of his final requests."

"I'm flattered," I said, and I was. I'm still new enough at this writing game to be totally blown away by anyone who declares himself (or especially herself) my fan. In this case, however, my fan appeared to be dead, and I smelled trouble. So I said, "Unfortunately, I'm all tied up."

"I'll pay you *one thousand dollars* for a four-line epitaph."

A thousand dollars for four lines? I didn't quite know what to say to that. My better judgment was screaming, hang up now or you'll be sorry. Yes, but a thousand dollars!

I followed her directions to Yurek Rutz Boulevard, a street that appears on none of my borough maps, and when I found it, I could see why. It was no

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

more than a track scraped in the dirt, a do-it-yourself road abutting a private airstrip. The street sign was hand-lettered on a wooden plank and nailed to a post at the top of which sagged an aviation wind sock. A worn-looking single-engine Cessna 150 was tied down alongside the strip, and beyond that sprawled a weathered, old log cabin.

My caller, Emma Rutz, came out of the large, screened cabin porch to greet me. She was elderly, as I had discerned over the phone, but surprisingly attractive. Petite and graceful, with stylish curls and striking features, she wore a light cotton print dress and beaded moccasin slippers—hardly the attire of grief.

She ushered me into the porch and made me comfortable behind a little table laid out with cups and saucers and plates of homemade sweets. It was only when she went into the cabin for tea that I noticed another occupant at the far end of the porch, a huge, grizzled old man in pajamas and bathrobe sitting in an overstuffed armchair. This gent paid me no mind; indeed, he seemed totally engrossed in some invisible drama unfolding in the front yard. He shook his head and grunted and occasionally whistled through his teeth. And although there was nothing happening in the front yard that I could see, I did hear the sound of heavy machinery around back where some sort of construction must have been underway.

When Emma returned, she nodded at the old man and said, "That's my husband, Yurek Rutz."

I gave a little start; I hadn't expected to see my client still warm. "You spoke of him in the past tense," I said.

She laughed. "Did I? A slip of the tongue. Or maybe not. For all practical purposes, my husband is already gone. He hasn't expressed a lucid thought in months now. What you see there," she said, waving a fine-boned hand at the seated figure, "is merely the 'chassis,' as you once termed it." Again I was taken aback; I had never been quoted to myself before. "He has Alzheimer's," she continued, "very advanced. As well as terminal congestive heart failure. Not to mention the cancerous prostate and renal failure. It's a crap shoot what'll kill him first. My husband was never one for half measures." She sat and poured tea. "Your deadline is January, by the way, though if you finished sooner, we could carve the stone."

Carved in stone, now there's an expression to tickle an author's heart. I glanced again at Yurek Rutz. He was watching us.

Emma said, "Would you like to see it? It's out back."

"The stone?"

We finished our tea and walked around the cabin past a vegetable garden and flower beds in full bloom. There we came to a solid slab of jade the size of a sport utility vehicle. It had been roughly hewn into a rectangular block. It was Alaskan jade, Emma Rutz informed me, that they had uncovered at their gold mine up near Circle City. A devil to move here, she assured me. While jade is common in much of Alaska, it's generally of an inferior quality, too brittle for carving and too dull for jewelry. This giant hunk, however, was high grade. I could tell by examining a square surface at the center of the slab that had been cut flat and highly polished. There was a translucent quality to it, the illusion of looking into a watery green depth. And someone had already begun to inscribe it. A very expert hand had cut the name YUREK RUTZ in serif capitals into the polished surface, and below it the unfinished dates, September 9, 1922–. Below that remained enough space for a four-line epitaph.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The machine sound began again, louder and nearby. I asked Emma what it was, and she beckoned me to follow her into a thicket of willow brush. A dozen yards in, we came upon a truck-mounted drilling rig. The sign on the truck door panel said, "Geyser Wells," and a phone number. The drill operator idled the engine when he saw us. Emma Rutz said to me, "I believe you know Mr. Boothtittle." Indeed I did. I had contracted with Byron P. Boothtittle on a number of occasions for the borough. Besides wells, his company also drilled test holes to measure permafrost under proposed building sites. We require such tests for new subdivisions and any zoning changes. Informed land use in the Fairbanks North Star Borough requires knowledge of soil conditions deep underground because an ice lens, even one located a hundred feet beneath the surface, can undermine and eventually topple a modern building.

Emma Rutz asked Byron how the job was progressing. Byron glanced at me, but she nodded for him to speak.

"Hit frost at sixty feet," he said. "So I took 'er down another sixty to see how thick it was. Bringing it up now."

He returned to the rig, and we watched as he methodically extracted his drill. He raised it six feet, uncoupled a section of pipe, raised it another six feet, uncoupled another section. During a lull in the engine noise, I asked him how deep the water table was around here. He looked at Emma Rutz before replying, "Ain't no water here, s'far as I know."

This made no sense. I could see he was using a water well bit: the hole was wide enough to install well casement.

When finally he raised the bit, he took a handful of dirt from between the auger blades and rolled it around in the palm of his hand. It looked somewhat like crushed root beer popsicle, and ice crystals gleamed in it as big as dimes. Finding permafrost is never an occasion for celebration, but Byron P. Boothtittle seemed pleased. "I'll sink 'er another sixty," he said, "and see what's what."

Emma Rutz walked me to my car. I could see her husband's silhouette through the porch screen exactly where we'd left him. Emma Rutz handed me a cardboard box. "Some of our scrapbooks and things," she said. "Take especial care of them." I put them in the back seat and climbed in behind the wheel. "By the way," she said, "the epitaph, besides having four short lines, should mention his name, Yurek Rutz, at least twice. And *very important,* it should be catchy."

"Catchy?"

"Yes, snappy. Like an advertising jingle. Something that goes round and round in your head. Think you can do that?"

For a thousand smackers, yes, I thought I might.

I should have never taken the gig. You know me, Mr. Dozois, I'm a slow slow writer. I'm pathologically meticulous. I am compelled to revise even my e-mail a half-dozen times before I can send it. Did I write an epitaph for Yurek Rutz? Yes, I wrote hundreds of them, thousands, but none seemed inspired, or even adequate. To say nothing of snappy.

Here lies Yurek Rutz,
Who served his country well
In war and peace.
Yurek Rutz, loving husband.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

This is not the best thing I ever wrote, but it was among the best of my epitaphs. I just couldn't get the hang of it, though I scoured the scrapbooks for inspiration.

Army Air Force pilot Yurek Rutz was a boy of twenty-one in 1943, when he first landed a P-63 King Cobra fighter plane at Ladd Field outside Fairbanks. He was one of dozens of pilots ferrying Lend Lease war planes across Siberia to our fond ally, Stalin, in the war against fascism. Fairbanks was the transfer point; Soviet pilots took them from there. Yurek Rutz never got to spend more than a day or two in Fairbanks before being shuttled back to Great Falls, Montana, for another plane. Nevertheless, in his two dozen brief visits, he managed to fall in love with both the town and the awesome landscape surrounding it.

Later in the war, he met a nurse attached to the Royal Air Force outpost in Sierra Leone. Emma Shawcroft. Though it was another encounter of brief duration, they fell in love. After the war they married, and she followed him back to the frozen north.

A jack-of-all-trades
And a friend to all—Yurek Rutz.
A leader in the community
And loving husband—Yurek Rutz.

Yurek and Emma Rutz quickly melded into the rough and ready society of mid-century Fairbanks. In those days, it took a great deal of pluck to live here, a willingness to seize any honest opportunity, to throw off the strictures of caste and class, and to extend your hand in friendship to any warm-blooded soul in sight. (I have often wished I could have lived in Fairbanks in the 1940s, instead of arriving all green and greedy for the Pipeline in 1973.) Between the two of them, Yurek and Emma Rutz toiled at one time or another as trappers, roadhouse keepers, a baker, a surgical nurse, land surveyors, and camp cooks. But their most enduring enterprise was the gold mine, which they staked on land that straddled the Arctic Circle. And it was Yurek Rutz's work as a pilot that sustained them through the lean times. A good pilot can always find work in Alaska, where small planes are as common as taxis in Manhattan.

One thing I never glimpsed in all their letters, newspaper clippings, and photos was the trace of a child. They apparently never had one.

When Emma Rutz called for a progress report in early December, I was both relieved and panicky. Relieved because the commission, as I had feared, had taken over my life. It consumed all my free time. I suspended work on several promising short stories because I couldn't concentrate on anything but epitaphs. Even my day job at the borough was beginning to show the signs of neglect.

Panicky because even with all my effort, I had nothing to show. Nevertheless, I allowed her to persuade me to come by that evening with my ten best candidates.

Watching her face as she read them, I knew how wide of the mark I had hit. We were seated at the table in their snug living room, the bare log walls reflecting a golden glow, and the smell of wood smoke perfuming the air. Yurek Rutz was propped up in a wheelchair in front of the cast-iron stove. He looked much worse since my first visit. He'd lost a lot of weight, his bloodless

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

skin hung in folds from his bones, and his breathing was labored. To my untrained eye, he looked sick enough to require hospitalization.

Emma Rutz finished reading and looked at me over the rims of her glasses. I instantly realized I had wasted five months and that I would never see my thousand-dollar commission. I was bitter with myself. "I'm sorry," I said. "I did my best. You still have time to hire someone else." I wanted to say—to hire a real writer.

"No, no," she replied. "These are a good start. They just lack a certain something."

"I know, I know! But what?"

"Hush," she said and patted my hand. "It's my fault really. I should have told you everything." She brought a notebook from a shelf and placed it on the table before me. "My husband was a spiritual man. He was an original thinker. He used to tell me about flying all alone high above the clouds in a small airplane, how calm and peaceful it was, how the loveliest thoughts would come to him then, like blessings. My husband was never one for organized religion; he made up his own as he went along." She opened the notebook to a dog-eared page and pointed to a passage. In a bold, but very legible script, Yurek Rutz had penned:

What's in a name? Our humanity, that's what. A name is mankind's first great discovery, even before fire. Names meant we could talk about things without having to point, but they were much more than that. A name helped things to become and to endure. For example, with a name we could tightly bind a baby's soul to its body so it wouldn't escape and the baby die. And with names, we could keep our ancestors from wandering away from camp after death. Why do you suppose the warlords of antiquity raised their hordes and conquered their empires? For fun and profit? No. For glory? Hardly. For immortality, that's why. They knew that as long as people uttered their names—in terror or love, it didn't matter which—that they would never die. Raise a big enough stink and you can literally hurl your name down the corridors of Time. Alexander, Constantine, Tamerlane, Genghis Khan. The armies have crumbled into dust, but these names will roll on as long as there's people alive.

And that's also why artists paint and writers write. Why doctors discover new diseases. Not to cure them, but to name them after themselves. Parkinson's. Alzheimer's!!!

It went on like this for some pages: Chinese ancestor worship, the politics of place names, the true goal of explorers and daredevils. How by killing a celebrity, a lazy person's name gets a free ride. While I read, Emma Rutz excused herself to make cocoa.

. . . I am writing about true immortality, about the continuation of your awareness after death. It takes about a thousand years for a human soul to completely biodegrade because the soul is made up of the three toughest, most enduring forces in nature: love, hope, and memory. At death, the soul is cut off from all new experience. It loses its eyes and ears to the world. So it slumbers and dreams of life. It confuses its dreams with life itself. But dreams destroy the soul! *Like water, dreams seep down into the center of the soul and* crack it, pulverize it! *First our body dies, then our soul leaks away in dreams. This is the fate of all of us. Unless we learn the secret of names.*

* * *

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

My reading was interrupted by the arrival of Byron P. Boothtittle, well digger and, apparently, Yurek Rutz's male nurse. Today was bath day. Byron pulled a chair next to Yurek Rutz and attacked his bristly growth of beard with an electric razor. He kept up a constant banter with his old friend, a lopsided conversation to be sure, as Yurek Rutz contributed only squeaks and shouts and a lusty curse or two. Byron yakked away at him nevertheless, bypassing his diseased brain, I supposed, and addressing his soul directly.

In life, your name is your handle, to be used or abused by anyone who knows it. In death, it's your last link to life, like a string tied to the toe of a sleeping man. Every time we speak your name, it's like tugging that string. Tug it often enough and we wake you up! In this way your slumbering soul is roused from its corrosive dreams.

People like Abraham Lincoln and Adolf Hitler never really die, for at any given moment, their names are on the lips of millions of people, and will be for centuries to come. They are alive as you or me, lounging in their graves all amused and outraged over the evening news.

"So," I said to Emma, who waited anxiously for my reaction. "So."

"It could be true," she said. "Why not?"

I looked at her closely. "Do you believe it?"

"That hardly matters. *He* believed it."

"So my little four-line epitaph is supposed to put his name on the lips of millions? Through the centuries?"

"It's a start! We couldn't exactly afford the Trump Tower, now could we?" She embarrassed herself. Byron came over and rested a hand on her shoulder.

"I, for one, believe it," he said. "Ever last word of it. Yurek Rutz was the smartest man I ever knew."

Emma Rutz said, "Your epitaph is one small, albeit important, piece of a much larger plan. Really, Mr. Marusek, I would have thought you'd hear of it through your job at the borough. The Frontier Alaska Air Museum?"

The Air Museum. Now that she mentioned it, I had heard that the Air Museum board of directors was increasingly dissatisfied with their current lease at Alaskaland. Since the lease was up soon, they were talking about moving.

"Yurek Rutz was a charter member of the museum," said Emma, "and he sat on its board. We're offering to donate our airstrip and twenty acres at no cost to serve as a permanent home for a new museum."

Aha, I thought, a new museum, busloads of tourists, and that Bronco-sized gravestone strategically set in the middle of it all. "Is that why you were testing for permafrost?" I asked Byron. "For a building site?"

"Nope," he said.

I looked at Emma who said, "We intend to maintain both my husband's brain and his soul until such a time that modern medicine can cure him." I must have looked confused, and she seemed disappointed with me. "Really, Mr. Marusek, I shouldn't think it necessary to spell it out for *you.* Nanotechnology? Rebuilding whole bodies from strands of DNA? Isn't that the sort of thing you write about?"

"Yes, I do. But I write science *fiction.* Nanotech is still decades away. Half a century or more." I was not only confused now, but nervous too. "What exactly are we discussing here?"

"Why, cryonics, of course."

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"Oh, cryonics!" I said, relieved. The talk around the table, not to mention Yurek Rutz's esoteric writing about the secret power of names, had grown a little too spacey for me. I was glad to turn to a topic of relatively solid footing, such as the freezing of dead people in canisters of liquid nitrogen. "So Yurek Rutz is a member of Alcor?" I said. "Why didn't you tell me? Shouldn't you be transporting him down to Arizona by now? Or are they sending a Suspension Team all the way up here to Alaska?"

Emma and Byron looked at each other in puzzlement.

"Cryonics. Alcor," I said. "Dewars of liquid nitrogen? Where will they do the washout and initial perfusion?" Looking at them I realized they had no idea what I was talking about. Then it dawned on me what they were up to. "Don't tell me you're planning to do this yourselves? You're not actually thinking of freezing his head and dropping it down that permafrost hole? Please say no."

"Yurek Rutz called permafrost the poor man's cryonics," said Byron.

"No," I said, "it's not. Permafrost is nowhere near cold enough. Besides, with global warming, permafrost all over Alaska is melting."

"Maybe it is," said Byron, "but I sank a shaft four hundred feet to bedrock, and it's frozen all the way down! Take a while for that to melt, I'll wager."

"This is crazy," I said. "What about cellular ice crystals? What are you using as a cryoprotective?"

"For freezer burn?" said Byron, leering like the lunatic he was. "Yurek Rutz and I got that all figured out. I'm going to dip his head in a sugar solution, then vacuum seal it, just like we do frozen salmon. And they thaw out just fine."

"You're going to freeze it in your food locker?"

"Nope, won't have to. We just wait for a good cold snap—when it drops to forty or fifty below zero—then we set it out on the stoop a couple of hours. That oughta do the trick. Then we drop it down that hole and shove the stone over it. Outlast the pyramids." He looked over at Yurek Rutz. "Ain't that right, Rutz?"

I glanced at Yurek Rutz. He was sleeping. I said, "And what makes you think he'll conveniently die on cue when it's forty or fifty below outside?"

In reply, Byron P. Boothtittle winked at me.

Emma Rutz decided that Byron had spilled enough beans for the moment and asked him if Yurek Rutz was ready for his bath. When Byron wheeled Yurek Rutz from the room, she said to me, "Are you married, Mr. Marusek?"

"Used to be. Didn't work out."

"I'm sorry to hear that. I hope you find someone else real soon. Are you looking?"

"Oh, yes," I said, "but Alaska isn't exactly a haven for singles."

"So I've heard." She got up for a moment to rummage through a drawer for her checkbook. "Young people today don't know what it's like to share an entire lifetime with one person. I think that's sad."

"So do I."

She wrote out a check and passed it to me. It was for one hundred dollars. "Consider this an advance."

I pushed it back to her. "I'm not planning on writing any more epitaphs."

She passed it to me again. "Then take it for your work-to-date."

I did. I folded it and put it in my shirt pocket. Good thing we writers write for immortality and not for money. This job had grossed me about twenty cents an hour.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"But please don't give up yet," she continued. "Now that you know the whole story."

"The whole story just makes it worse. Besides, I'm no good at epitaphs."

"Of course you are. You just need to change your style a little. Here, try this. Repeat after me—Yurek Rutz."

"Yurek Rutz."

"See? See how easy?"

Well, Mr. Dozois, some people discover comets, while others dismember young boys and eat them. Many are the paths to immortality. At the beginning of this letter I promised you a proposal. It's coming right up, so stay with me a while longer.

I should have gone straight to the state troopers, but what was there to report except idle talk and a suggestive wink? There is no law against dying at home in Alaska. Nor against home burial, for that matter, in your back yard. So, I gave in and deposited the check and tried to forget all about Yurek Rutz. But my thoughts kept stubbornly returning to him, and I knew I'd never be free of him until I gave the epitaph one last go. So I set my kitchen timer to one hour and pledged that I would write until it rang, and then be done with it forever. Remarkably, it didn't take an hour. The final epitaph slid out complete in about ten minutes.

Free at last, I reclaimed my normal life. Christmas was upon us and New Year's parties and late-season skiing. Due to La Niña, the weather remained unseasonably mild. I didn't think about Yurek Rutz again till mid-January when I learned through the Community Planning Office that the Air Museum signed another ten-year lease with Alaskaland. They had turned down the Rutz offer.

I called Emma Rutz. "Happy New Year," I said. "How are you? How's Yurek Rutz?"

"Barely hanging on," she said. "He could go any minute, but Byron reads him the weather forecast ten times a day, so we think he knows he can't give out yet."

I told her I'd heard about the Air Museum deal, and she said not to be concerned; they were busy with alternate plans. What plans? I asked. She said there was, for example, the bereavement chain letter idea. Instead of sending money, you send the names of your dead. If no one breaks the chain, your names get read by over a million people.

I told her that that sounded like the sort of thing that might catch on.

"And then there's our site on the Internet," she continued. "Byron set it up. He says to point your newsreader—whatever that means—to news://news.sff.net/sff.people.yurek-rutz.

She filled me in about other ideas before asking if I had any more epitaphs. I had to dig through stacks of paper to find it, and when I read it to her, to my delight, she loved it and said it was just perfect. She had me read it several times through so she could copy it down, and she promised to drop a check for the remaining nine hundred dollars in the mail that afternoon. I couldn't believe my luck.

Before I hung up, I asked her something that had been on my mind. "Tell me, what happens when they thaw out his head in 2051, fix the Alzheimer's, and grow him a new body? Does he wake up alone?"

"Oh, I suppose not," she said. "When my own time comes, we might find room for my poor noggin down that hole of his."

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

I'd suspected as much. "Good for you, Mrs. Rutz," I said. "I truly hope it works out for the both of you."

I could have said more. I wouldn't be surprised if there wasn't a whole bowling league down there before Byron P. Boothtittle runs out of vacuum wrap.

I began to make my good-byes when she stopped me and said, "Don't you want to hear about your next commission?"

"Sorry," I laughed, "but I'm all commissioned out."

"Are you quite sure?"

"Yes."

"Pity, because the Yurek Rutz Memorial Trust Fund is willing to pay you a commission of one hundred dollars each time you manage to have Yurek Rutz's name printed in a nationally distributed book or magazine."

"You want me to write about him?"

"No, just get his name in print. It's the name that counts, remember?"

"You mean like I could name a starship the *Yurek Rutz* and mention it five times in a story and you'll pay me five hundred dollars?"

"Exactly. But why limit yourself to five times? A boy genius like you should be able to work it into a story twenty times."

"I'm sure I could work Yurek Rutz in fifty times," I said, "but who would ever buy a story like that?"

So there you have it, Mr. Dozois. Think you could help out a struggling writer? So far this letter mentions Yurek Rutz forty-one times. When you count the title in the Table of Contents and along the bottom of the right hand pages, that adds a dozen times more. Watch this: Yurek Rutz, Yurek Rutz, Yurek Rutz. There, that's my car payment this month. Yurek Rutz—groceries and gas for a week! This could prove to be my own private National Endowment for the Arts. And it sure beats the lousy five cents a word you pay me for stories. So what do you say?

I realize this isn't your typical science fiction story, but it *is* concerned with nanotech and cryonics, which is harder SF than some of the stuff you print.

Well, it's time to send this off to you. The temperature last night dropped to minus twenty-eight degrees, and the radio says a mass of Siberian air will move across Interior Alaska tonight, promising a good old-fashioned cold snap of minus fifty degrees or colder. Byron P. Boothtittle is in his kitchen, no doubt, sharpening his boning knife. The permafrost crypt is waiting, as well as that slab of jade on which are carved my immortal words:

Eternal life is free.
Please don't think me nuts.
Just repeat after me . . .
Yurek Rutz, Yurek Rutz, Yurek Rutz

So, Mr. Dozois, how about it?

Sincerely,
David Marusek, David Marusek, David Marusek

PS: What if I split my commission with you 60/40 (and 80/20 for reprint and foreign editions)? ○

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Lois Tilton

DRAGONS' TEETH

Since 1986, the author has sold four novels and more than fifty short stories. Most recently, she's been researching Greek history for a novel set during the Peloponnesian Wars. "Dragons' Teeth" is her first story for *Asimov's*. The tale arose out of a debate over the use of land mines in warfare.

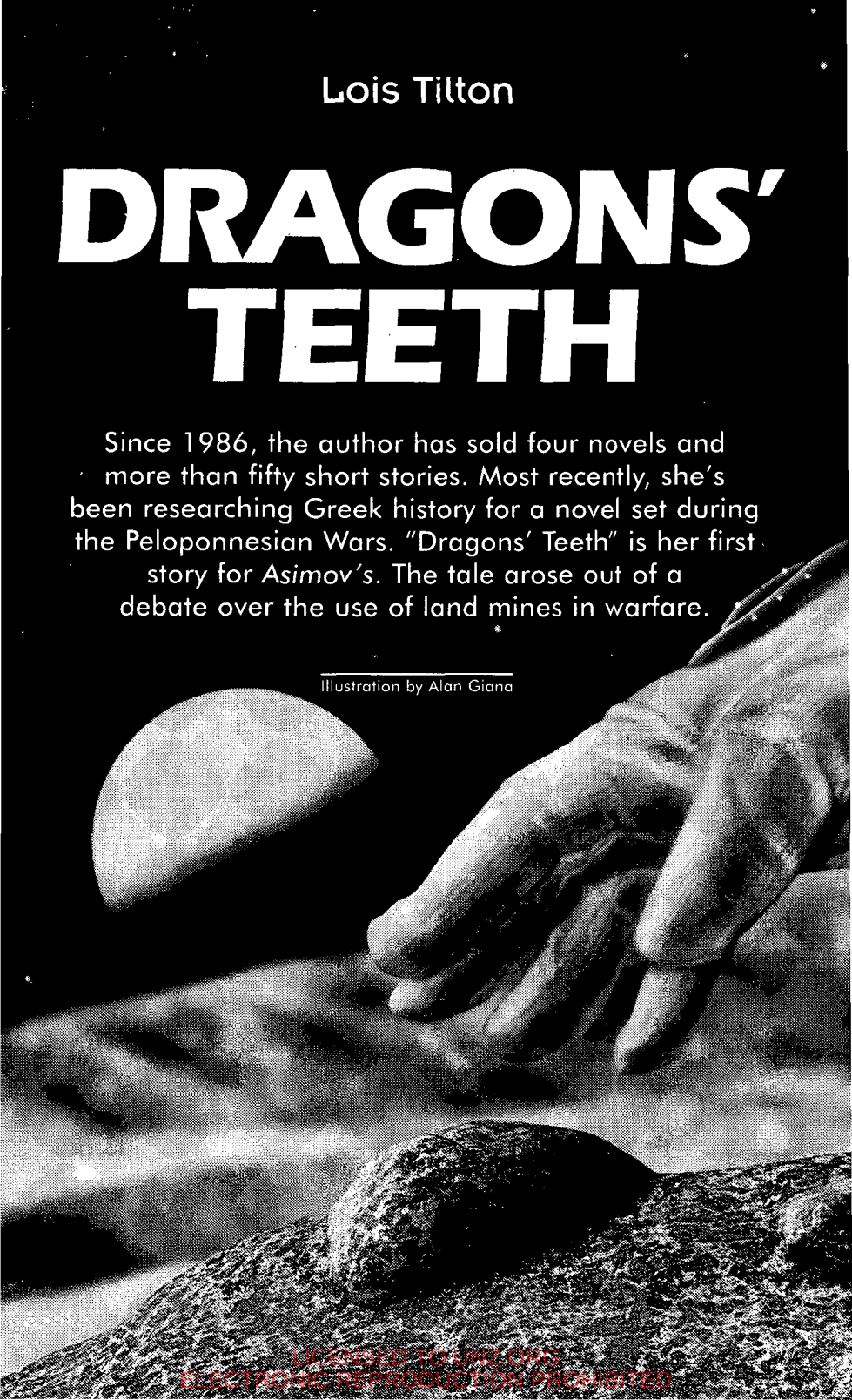


Illustration by Alan Giana

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The boy claimed he was eighteen.

Twelve or fourteen was what he looked. Sixteen, maybe, at the most, thought Minh, considering that hunger had a way of stunting a kid's growth. This one looked hungry, for sure.

Minh cuffed him hard, before he was even out of the vac suit. Get his attention. "What the hell were you *doing* out there? Don't you know you could get killed? Do you want to get your head blown off, is that it?" Hit him upside the head again—emphasis.

Of course you only had to look at Minh to see how you could get your legs blown off, as easy as your head. But he was a born Luner, he could manage just fine here in the tunnels, where using the handholds was as easy as walking. And the activity gave strength to the arms. The kid rubbed his head and winced.

"Get that suit off," Minh snapped. "And careful with it."

The suit was the thing. A lot harder to replace than the refugee kid inside it—that was the hard truth. Karli Ottinger sat sweating blood day and night to keep those suits patched together, Karli would have blown the kid's head off himself, if it wasn't inside one of his helmets.

Sullenly, the boy stepped out of it, and Minh reached out to retake possession, turning it inside out and back to check for damage and also any contraband he might be carrying. "What the hell did you think you were doing?" he asked again.

Of course anyone who worked on the surface would know damn well what the kid was doing out there. Illicit salvage. Stealing scrap. Admin was taking a hard line on it lately, calling it sabotage.

The boy wasn't talking. The boy's glance kept going behind Minh's shoulder to the airlock, calculating his chances of breaking past to escape. Minh shifted to better block his way. "Let's see your ID," he demanded.

Against his will, the kid showed him his card (and leave it to Admin—no matter how scarce the resources, everybody had to have an official ID card, no exceptions). Minh's reader confirmed what he'd already figured: temp status, basic allotment. Refugee status.

The basic allotment was a travesty. People resented them, the refugees. Each additional body meant there was less for everyone else—less oxygen, less water, less food. Admin was stretching available resources to the breaking point just to take care of their own, people said. The refugees ought to have to work for a living, like everyone else. But the same people didn't want to lose their own jobs to them, either.

Only some jobs—nobody wanted.

Minh said, "Tell me again, what you were doing."

"Nothing."

"Right. You steal a vac suit, you sneak outside to the surface, just to stroll around and enjoy the view."

"Didn't steal nothing. You find anything on me? Did you?"

Because Minh had searched him, searched the suit. "What did you think—people were letting salvage lay around outside in the open, right outside the main service airlock?" *Think about it, kid,* his voice said clearly. "And I suppose you didn't happen to know that selling salvage scrap on the black market is illegal, either?"

Sullen expression grew more angry. But that wasn't what Minh wanted. He changed his tone. "Look, I don't know what anyone told you, but it's a minefield out there. You understand that? You understand where it comes

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

from, the scrap we salvage out there? *You understand how you could get killed?*"

Sullen to defiant now. "I'm not afraid."

"No?"

"I know what I'm doing."

"Oh, you do? So what's this, then?" Minh pulled an object out of his coverall pocket and flipped it in the boy's direction, watched how he snagged it out of the air. The thing looked like an ordinary rock, but appearances were deceptive.

Dubiously, "It's a bomb?"

"A live explosive device," Minh confirmed, observing how the kid handled the thing. It was one he used for demonstration and training. "Now, you tell me—throw that out on the surface, with every other rock out there, you tell me how you're going to know which one is the device. You tell me what's going to happen when you're walking around out there in a field where there might be a dozen of these things, or more, tell me what's going to happen when you step on one?" Because of course that was the most insidious thing about the devices, that no one could tell, just from looking at the ground, just how much danger was there.

The boy looked at him now with suspicious curiosity. "If it was really live, if it was going to go off, you wouldn't have thrown it like that, not in here."

Minh liked the answer. The kid could think, at least. He wasn't stupid. "That's right. This one is what we call a sleeper. It has an internal timer. These sit out there right on the ground and wait. You can't set them off, no matter what you do—step on them, kick them, drive a rover across them. You wouldn't even recognize them if you didn't know what to look for. One day, though, with no warning . . ." he gestured at his missing legs. "So you still think you know what you were doing out there?"

Unwillingly, "Maybe not." Maybe even a little bit scared, now that he was finally starting to get the idea.

It was enough for Minh. "What I want to know is, who were you going to sell the stuff to, if you found anything?"

The kid shook his head. "Nobody."

"You went out there to steal scrap for nothing? You were going to give it away, maybe? Or turn it over to Collections, just like any good citizen?"

"Yeah, well, I'm not a citizen, am I?" Defiant again. Hostile.

"That doesn't answer the question."

"Look, I just heard—around, you know—that people might want to get some of this stuff, that they might pay, if somebody just happened to pick some up."

"What people?"

"Just . . . some people." Evasive.

"Well, what if I wanted to know who those people might be? What if I was interested in meeting them? It might be a . . . profitable relationship. For everyone involved."

Bait out on the hook. Kid could smell it. Hungry. Yes. As much wanting in that boy's face as Minh had ever seen.

But not stupid. He shook his head. No. "I told you, I don't know who they are, I just heard it—around. I don't know any names."

"You sure?" Minh pressed him, tapping his reader, sign of status and authority. "I could make it worthwhile. Like, maybe a job around here."

"I don't *know*, I said!" Lying about it. Was he afraid, maybe? Or trying to protect someone?

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"If that's how you want it." Minh took back the sleeper device.

"So I can go?"

"This time. This once." He moved aside from in front of the lock, and the kid was through it almost before the pressure seal opened, just in case Minh might be going to change his mind. But Minh damn well wasn't going to see the kid put out to suck vacuum just for trying to pick up a few pieces of scrap. Whatever his name was. Minh checked his reader again. *SHAH, VIJAY S. AGE 18.*

No way.

It used to be, you could blame the war for everything wrong. You could say: *Before the war* and *If it wasn't for the war.* These days, though, almost nobody remembered how it was before the war. When things worked. When there was trade back and forth with Earth, even with all the troubles. When there was anyone on Earth to trade with.

Most of them in Admin didn't remember, that was the trouble. Not enough left from Minh's generation.

We were heroes, he could say now, nursing his rationed brew in the commons. The faint alcoholic haze made it easier to look back. *We never thought of ourselves. We risked everything to save this settlement, we paid . . . with everything.*

He drained the last of the brew. Was this what they'd died for, all the best of his generation? So a bunch of sneak thieves could set up a black market in the shards of the bombs that had killed them?

We never needed Admin to make us go out there. We knew what had to be done, we did it. We never asked for any reward.

Minh stared into the bottom of the empty glass. You couldn't even get drunk any more, not with what they rationed you to.

"Wass down dere? Cockrosh?"

He looked up. A face that was more scars than face, a mouth that had trouble forming words clearly. But Lee knew what a cockroach was, which no one outside their generation could say.

"Old ghosts down there," he replied. "Too many of them."

"Need bigga glass, hol' dem all."

"Need more brew," Minh said glumly. But that was the last of his ration, no more now till next month, which was tomorrow, as Luners counted the daytime/nighttime cycle.

"Hear you had pro'lem, out dere?"

"Had a little trouble this shift," he confirmed. "Nothing much. Might turn out to be something bigger, though. Black market—that kind of thing."

He used to have a school picture somewhere in his quarters—his whole age-class in it. The picture would have remembered what Lee had looked like, before the war. Before an anti-personnel device went off in her face. Pretty. Minh could swear she'd been pretty. But he had to admit he couldn't recall exactly. This was the face he knew now. You could almost get used to it after thirty years. The same way he'd gotten used to not having legs. More than half his life this way.

They don't deserve it, he thought unclearly. *They didn't go through what we did.*

"Can't even get drunk any more," he mumbled. "Damn war."

But Lee laughed. "I dink you come close enough now!"

Minh laughed, too. Until the thought came to him from somewhere: the ba-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

sic allotment for the refugees didn't include brew. No way to get drunk at all, no way to forget the war. Not for them.

Minh had contacts in Admin. He traced the boy to the uncle he lived with—at least he claimed to be an uncle—and a woman and at least two other kids. It was the uncle he suspected, a man named Rao Venkata, with shady associates and no visible means of support. Of course Minh knew what that could mean, up in the warrens. It was all a gray market at the best, up there, and the usual petty vice. Not that every refugee was crooked and not that Minh could bring himself to blame them if they were. But he just had a feeling it was the uncle the boy was protecting. And if he was forcing that kid to steal, Minh was going to make sure he paid for it. A little dark dealing in the corners—that was one thing. But he wouldn't tolerate men who preyed on kids, sent them out to do the dirty, dangerous work while they stayed safe and took the profits.

What he hadn't expected was the boy showing up again a few shifts later. Not sneaking around—openly. But a nervous look to him, and a large bruise across the left side of his face. It made Minh clench his fists when he saw that.

But the kid said, "Look, you know what you said? About you'd make it worthwhile?"

"You mean, you tell me who was going to pay you for the scrap?"

The kid shook his head forcefully. "I mean the job. Like you said. I looked it up on the list. It's not restricted. No reason I couldn't do it, is there?"

It took Minh off balance. He remembered saying something about a job, but he'd been thinking vaguely of something part-time. Not . . . "The bombsquad? It's not a job for a kid. You have to be eighteen, for one thing."

"You saw my ID, before." *SHAH, VIJAY S. AGE 18.* Minh didn't believe it this shift any more than he had then.

"You mean, you want to get your head blown off? Weren't you listening to that part?"

Stubbornly, "You said I didn't have the training. Anybody who goes out there, they take the same risk, right? You take the same risk. So all I need is training. I checked the list. It's not restricted. None of the jobs in Salvage are. Or is it you Luners just want to keep them all for yourselves?"

Minh shook his head. Rules said you had to be eighteen, but how many times before had he been willing to look the other way on the rules? Because people had to eat—even underage refugee kids. And because somebody still had to do the job, and Luners didn't want it, not enough of them did. Not if they could find something better, and they had the priority.

But the settlement needed the scrap. And the bombs and mines were still out there.

During the war, Earth hadn't simply tried to obliterate the settlements and other lunar facilities, they made war on the people, too. Emergency crews rushing out to repair damage to the water pipelines and the fragile solar panels had been blown apart by anti-personnel devices. There were a dozen different kinds. The bombsquad had names for them: sleepers and creepers, hoppers and poppers. Every one of them designed especially to function in the airless lunar environment, manufactured especially for the war on the lunar settlements.

Minh knew them all, as he knew how many deaths had paid for the knowledge, all the good men and women they'd killed. There'd been no choice, then,

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

during the war. It was a matter of desperation, with life-support threatened—vacuum seals blown, the air supply system ruptured, and the water pipelines from the deep-crater reservoirs. And volunteers had gone out to make the repairs, volunteers had died, and the settlements had survived . . . some of them had survived.

Now the war was long over, but the devices were still out there. No one knew how many—estimates ranged upward from the millions. Hundred millions? Possibly, the experts thought. Minh did. At least a hundred million, still causing sporadic damage to vital infrastructure, still killing people, threatening the maintenance crews, hampering operations. It didn't take human activity to set them off, either. A meteorite strike could, or a quake. And also still out there, along with the fragments of shattered facilities, were the fragments of exploded devices strewn across the lunar surface, the valuable shards of metals and plastics that lunar facilities couldn't produce.

Somebody had to salvage it. And somebody had to sweep the areas first, locate the remaining live devices and dispose of them. Rules said they had to be eighteen because it was likely to get them killed. Rules also said they had to be volunteers, for the same reason. Vijay Shah, if you believed him, if you believed his ID, was both.

But Minh saw the thin, beardless face. The bruises. He knew better, maybe on both counts. "Look, you don't have to do this. There's a reason the job isn't restricted to citizens. I wasn't lying when I said the work is dangerous—you could get killed, mutilated. I can try to get you something else, some other kind of work, if that's what you want."

The boy's face twisted. "Some other kind of full-comp work, you mean? Or another shitty refugee job? Mopping the floor? Stirring the sludge in the methane tanks? That kind of job?"

Minh had no answer. He was the one who'd brought up the issue in the first place, though at the moment he was wishing he hadn't. He said slowly, "All right, then. But if I take you on, if I let you try this, there's got to be one thing clear. Rules say all salvage is settlement property. You turn it all in to Collections, every scrap you find. I catch you smuggling it out, I catch you with one little scrap, it's all over. And if you say you're eighteen years old, you know what that's going to mean, you know the penalty. So is it clear? If this is just a trick, another way to play the black market, you'd better forget about it right now."

"It's clear."

Minh still doubted. But he took the boy's ID card, made an entry in his reader, handed it back. "Take this to Admin, to Allotments."

The kid stared at it, caught in disbelief. "You mean—this is real?"

"Real as anything. They know my sig, they'll contact me if they have questions."

"I get quarters, I get full allotment? Just like that?"

"As long as you're signed on to Salvage work. Training counts. You can get killed just as easy, that's for sure.

"So you show up here, next shift. Find out."

So Admin didn't like it. So there wasn't actually a rule against it, they just didn't like the precedent, giving a refugee a full-comp job. Let him do the work, sure, no real problem with that. But the same allotment as a citizen? The same quarters?

Minh argued. He read them back their own rules. Reminded them again

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

how hard it was to get people into the bombsquad these days, how the ongoing projects depended on them. (Saying nothing about what he suspected the kid's age really was.)

And when it looked like Admin wasn't quite convinced, he brought in the black market thing. Not that he believed the kid himself was crooked, he didn't say that, either. But that certain parties already under suspicion might be shadowing him, that it might be a way to nab a black-market operation dealing in strategic substances. Because they all knew—the whole settlement knew—there was pilfering going on somewhere.

As for the kid, Minh promised he would personally keep him under surveillance. Special security measures, absolutely. If he turned out to be straight, that would be the end of it. And if he was crooked, well, he'd been warned what the consequences were.

And Admin bought it. So that later, seeking out Lee, "I got to wonder if I'm doing the right thing. About this refugee kid. Getting him into all this."

"He ask fo' it?"

"Yeah, I know. He volunteered. At least, he says so. But he lives with this guy—claims to be his uncle. He hits on the kid—I've seen it. Bruises on him. I think he made him come ask for the job."

"A sed-up?"

"Right. But what I am doing? Am I just setting this kid up, too? Risking his life just to try to crack a petty black-market ring? I know *damn* well he isn't eighteen!"

"He go' bedder chance?"

Minh shook his head. "That's the trouble, he probably doesn't. It's a hell of a thing, isn't it?"

Lee took his hand. "You do wha' you can."

It was still a hell of a thing, any way you wanted to look at it. But life in the lunar settlements had been a hell of one kind or another for everyone, since the war. Odds were, they couldn't survive for more than another two generations, before life-support started breaking down irrevocably.

But if you were still alive, you did what you could. Minh closed his hand around Lee's. You took what you could get.

This VJ boy wasn't the first underage kid Minh had trained. Fact was, kids had some clear advantages in this job: quick reflexes, quick hands and eyes. Kids learned fast—if they didn't blow themselves up first. His job was to help them stay alive, in one piece, if they were lucky, if they could pay attention to what he was telling them.

First device: "All right, you've already seen this one, so tell me what it is, what it does."

"Sleeper, right? It's got a timer inside. Goes off when the timer is set to."

"That's right. This one was originally set to detonate June 28, sixteen years ago. Probably before you were born." The boy, probably forgetting he was supposed to be eighteen, didn't correct him.

"So how do you know it's a sleeper?"

"You said so, you said I'd already seen it before."

"How could you tell the difference if you didn't already know?"

A shake of the head.

"See here? This slot? This is how you open it to set the timer—or switch it off."

"When do I learn to do that—disarm them?"

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"*You* don't. Once you get out into the field, you spot them, you tag them, you leave them for the experts. You try not to blow yourself up while you're at it. That's all. Is that clear?"

"Yeah, it's clear."

In fact, there were some kinds of devices they never tried to disarm. It was simpler—safer—just to set them off in place or, if the device was one of the big, unexploded bombs, down at the bottom of one of the deep craters. Pick out the fragments later. But the boy would find that out in due course. "All right." Minh replaced the first device with two others. "So which one of these is the sleeper?"

VJ stared at the two objects, picked one of them up to check for the identifying slot.

"You just died," Minh told him bluntly. "That one is what we call a clicker. It has a trigger. When you pick it up, you release the trigger, blow off your head."

VJ glared at him like it was some kind of trick he was playing, but Minh was serious. "If that thing had been live, I'd have had pieces of you splattered all over me." He pointed to the other object. "This one is a popper. Pressure-activated. You have to step on it, drive over it to set it off. I stepped on one—that's what happened to me.

"Okay, now, fact is, we don't come across many sleepers any more these days. Twenty years ago, it was different, but it's been too long since the war, most of them have already gone off, or they were duds in the first place. These other kinds, they can sit out there forever, just waiting for you to come along."

He swept both devices off the table, then placed three of them down again. "All right, now, which is which?"

The boy learned fast. He was smart—Minh had seen that from the first. His problem was always thinking he was smarter than he really was. Always wanting to take shortcuts, to rely on unreliable equipment instead of learning to use his eyes. Always too quick to minimize the risks.

Still, he did learn, and now he'd been fitted for a vac suit, ready to go out and practice in the field.

Karli Ottinger scowled at the fit, but he said it was the best he could do. Before the war, of course, plenty of child-sized suits were available, but they'd all been long since cannibalized for parts and patches. Nobody sent kids outside any more, and if the dome breached—you couldn't think about that.

"Maybe he'll grow."

"Maybe." But Minh, who had his own customized suit to accommodate his injuries, hadn't seen any signs of the boy growing yet. He was still as gaunt and hungry-looking as ever, despite the increased allotment that went with the job. Minh suspected it was all going to that "uncle," that Rao Venkata, but what could he do if the kid didn't complain?

"All right," he told VJ: "Suit drill."

Predictably, "I *know* how to put on a vac suit! Where do you think I was born, on the dirtball?"

"Suit drill, top to bottom," Minh repeated firmly. Kid might have been born on Eon or even here on Luna but Minh knew damn well they didn't have suit drill up in the warrens. And even with experienced workers, they had at least one partial suit failure every month. "Look, what do you think, we get replacement shipments of these things all the way from Earth? Every valve on

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

that suit is twice as old as you are. You check them out before you set foot into the airlock."

So he did, and again, until Minh was satisfied.

"That's the one you caught pilfering scrap?" Karli asked while the boy was occupied.

"No evidence of it, nothing to charge him with."

Karli frowned. "Taking a risk, though, aren't you? I mean, I know he's just a kid. Still."

"It's not just one kid, it's who he might lead us to, if they really are dealing strategic materials on the black market. We know something's going on, we don't know how big it is yet. If the kid's involved."

It was only logical. Pilfering a few grams of scrap—that was nothing. Collections was the place. And the kid was smart enough to know it. Or if a black ring really was involved, they had to know where the stuff was. That's how he'd do it himself, if he were setting up the action: Let the kid play it straight, turn in all his finds to Collections. And make his move from there.

Secretly, Minh had already consulted with Long in Collections, they'd increased security precautions. Hell, he could remember when there *was* no security at Collections, when it was just a spare room off the equipment storage where everyone threw the scrap they'd brought in that day. Even before that, when there was no Collections, when scrap was just junk they left lying wherever they found it, when they were too busy trying just to keep the settlement alive.

Before they realized just how completely they were cut off from any other source of supply. Whatever existing equipment could be cannibalized had already been used up to keep the core facilities working. Whenever a unit died, there was no replacement. Lunar colony settlements had been self-sufficient, in theory, but that was before the war. And even the original estimates had never included equipment failure. Every fragment of copper wire, every plastic shard could be used to keep vital systems operating.

Minh watched through the viewport while VJ moved around the clear zone, seeing how the kid operated out there on the surface. It was new to him. Kid from the orbitals, grown up in the warrens and the tunnels, never set foot on a surface before. But then most of the born Luners these days hadn't, either. You needed suits to go out there, and all the suits were reserved for maintenance and salvage.

(Remember when there were always vacuum suits hanging in the airlocks, in case of emergency? Available for anyone to use?) VJ hadn't broken any law by taking a suit outside, because no Luner could have ever conceived of such a law—before the war. It was the law now. Admin had just made it a rule. One more damn rule.

But remember, kids were quick learners, that was the advantage. Minh had a dozen demonstration devices strewn around out there. See if VJ could spot them. Reminding him first that there wasn't going to be any scrap he could pick up, not here in the clear zone, which had been picked clean and sifted over for years.

Soon enough, though, it was going to be time to send him further out with the regular bombsquad, the sweep and salvage teams. See what he was going to do then. Would he try to play the black-market game again—or not?

Shift over, everyone getting ready to leave. Minh put out a hand to stop the boy. "One minute."

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"Yeah?"

"It's these people you're living with . . . living with you—are you all right with them there?"

"You mean my uncle?"

"Look, the quarters, the allotment are *yours,* understand? You don't have to share them, not with anyone."

Disbelief in his voice. "You're saying I shouldn't help my family?"

I'm saying they don't own you. But Minh didn't say it. "What about your uncle? Doesn't he work?"

Evasive again. Defensive. "He has his business. My uncle was Administration on Eon, not just an ordinary worker."

And just what is his business? But that was too much to ask. Frustrated, Minh watched the kid leave. He'd been hoping that by now this Venkata might have slipped up, might have been arrested for something else. Let the kid off the hook. But Venkata was slippery, and Admin didn't want to give away that he was being watched.

Minh knew that line about the family. He'd heard it from his own family too many times, seen it warp lives, discourage ambitions. Heard it too often: *You owe your family. The family comes first.* Bitter memories there. *You have no gratitude, no respect. You should be ashamed for your selfishness. You dishonor us all.*

It was a cultural thing. It was how his grandfather had been brought up, his father. VJ's culture—he supposed it was much the same thing.

But then maybe the boy was the lucky one, after all. He still had a family alive.

First shift of the new lunar day. Sun back up in the sky, enough light again for the work they had to do.

VJ eagerly suited up with the others. Ready to go. First one into the rover. Minh had already checked him out on the rovers, but there was nothing to driving, even a man without legs could operate a rover. Minh was driving this shift, taking the kid out with him. First time past the clear zone.

Rover tracks marked the safe way, a pass through the hills, a route near-guaranteed to be free from mines. Not absolutely. There were some nasty little objects they called creepers that crawled slow and stealthy across the surface—even some that had been designed to bore down and tunnel beneath it. They used to have instruments to detect them, but that was a long time ago, and there'd never been many of them. So the bombsquad generally didn't bother to worry about creepers, it being a matter of odds, about the same as being drilled through the head by a meteorite.

Although that had happened, too.

Human activity had been altering the lunar landscape for more than four hundred years, since the first lander touched down. But the war had restored the crater to predominance, obliterating almost every man-made surface structure, the solar power arrays and mining installations. There wasn't much to distinguish a bomb crater from a natural one. Only the nature of the debris, which was the interest of the salvage crews. Now, tracks were starting to creep across the surface again, and that was the difference between now and the original settlement—people kept to the safe ways. They were recovering, but it was a slow process, and part of the cost was measured in human life.

Absent any new emergencies, like a rupture in the water pipeline, they

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

were working today on Quadrant 72 out on one of the level flats. A power array had stood there before the war. Another one would, eventually, like the one they drove past in Quadrant 18, online now and feeding solar energy to the settlement. First came the bombsquad to clear the area, to salvage whatever fragments remained. Later, a construction crew would follow in their tracks.

The rover passed beyond the hills, and Minh saw the edge of Earth on the horizon, glad because the planet's albedo reflected more light back at the lunar surface, made it easier to see what you were doing. It was VJ who suddenly straightened up and stared, and the awe was visible in his eyes even behind the distortion of his helmet's faceplate. And Minh realized: of course, the boy hadn't ever seen the Earth before, and here it was, so huge and bright in the sky you had to think it was going to rise and fill it entirely. So that even he stopped the rover to look, and the rest of the team, seeing them, turned to stare at it too.

Big white dirtball. It was VJ's word. A word from Eon, an Orbital word—the people who'd lived in tin cans floating between Earth and Luna. Before the war.

But Minh knew the white was cloud cover, and below the clouds it had always been a water ball, and blue. You wouldn't have realized how shallow those big, deep basins had really been. How vulnerable to a ten-kilometer lump of iron ore dropped on them from space. The only real weapon the Luners had.

We did it. We killed it, before they could do it to us.

Some people said you could still sometimes spot the sullen glow of erupting lava, through the clouds. Minh hadn't ever seen it himself. Orientale settlement was on the boundary between Earthside and farside, with its tunnels buried deep behind the mountains that usually blocked the larger planet from sight. And protected it from the powerful military lasers that had targeted the Earthside settlements so easily. After the homeworld authorities had grown impatient with the half-measures used against their most recalcitrant colony. Teach them a lesson, that's what they'd said.

But it was wasting time, standing here gawping. Wasting the settlement's air. Minh put the rover into motion again.

Quadrant 72 had been a flat lava plain when the original power array had been erected. Now, already, secondary explosions had eroded the contours of the original bomb crater. One detonation would bury the shards of earlier blasts, the next would fling them up and scatter them again. Slender poles demarcated the area where each team had been working. The others took their positions while Minh showed VJ what to do, communicating by hand signals. *(Remember suit radios? Before the war?)*

Slow, tedious, painstaking work clearing the ground. Hand-and-knees work (for the ones who had knees). Crawl and probe, dig and sift. Every few moments or so, one of the team would dig some object up out of the shattered regolith and drop it into the carry-bag each of them wore. Minh worked his own section, though he kept half his attention on VJ, the new trainee. He shifted his position a meter forward, awkwardly legless out here on the surface. He preferred the tunnels, with their convenient handholds. But at least shifts were never too long out here, no more than six or eight hours. You couldn't count on breathing much longer than that, you couldn't eat inside a vac suit, and you really didn't want to eliminate inside one, either. Not these suits.

After an hour or so, he noticed the boy's enthusiasm starting to fade. He

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

wanted to laugh. Poor damn kid. All the hours of training, waiting so long to get out here into the field, only to discover: this was just work, after all.

Sixth shift out, almost at the height of the lunar noon, so hot you could only work in the shade *(remember when the suits had cooling units?)*, VJ spotted the hopper.

At the edge of his vision, Minh saw him freeze, staring at a fixed point on the ground. *Don't touch it!* he wanted to yell, but of course VJ in his suit wouldn't be able to hear him out here. And the supervisor in him would have overruled the order, anyway. Let the kid handle it. See how he deals with the situation. You taught him what to do, didn't you?

And now, yes, very slowly, the kid was reaching for his markers, sliding one out of the sleeve. Placing it—very, very cautiously—into the ground so it pointed toward the device.

And now, only now, looking up to see Minh, looking up to ask: *Did you see? Did I do it right?*

Minh hitched himself closer to VJ's section. The boy used hand signals. *Hopper?*

Minh nodded affirmative. One of the nasty little ones, the device was made to detect ground vibration within a meter of its location. It got its name from the way it would jump up a meter or so before exploding into shrapnel, with a force capable of shattering a suit's face plate. It was a hopper that Lee had stepped into, so many years ago.

Lee—she was lucky to be alive. If VJ or one of the rest of them had stepped into the range of that hopper today, there was no way he could have saved him. Every rover used to be equipped with an emergency kit, but they just didn't have the equipment any more.

For a while, Minh remembered, during the war, they used to set those things off by driving a rover across the suspected ground. But they lost and disabled too many rovers that way, and they were irreplaceable.

You did good, he signaled VJ. They both backed away from the immediate area of the device.

Later, at the end of the shift, with the rover parked at a safe distance and the rest of the crew behind cover, Minh turned his attention to dealing with the hopper. This was one of the devices you didn't mess with, trying to disarm. You got under cover, you set it off, then you went back out to pick up the shards for Collections.

Nothing complicated about it, either. Minh handed VJ a rock that felt about the right size. *You think you can hit it from here?*

Eager grin on the boy's face. He wound up, let fly, then dropped face-down in case of a stray flying shard. The rock flew past the marker, struck, bounced, skidded across the ground. Nothing.

VJ raised his head off the ground. Disappointed. He hadn't thought he'd missed.

Neither did Minh. He scowled. *Try it again.*

He did. Again, no explosion, nothing.

The rest of the crew had come out from cover now.

Maybe it's not a hopper, after all?

Or a dud?

Minh's frown deepened. There were duds. Sure there were. And more than one person blown up who'd said to himself: Oh, that one didn't go off, it must be a dud.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

He moved forward, toward the device. Usual rule was: you let the one who finds the thing be the one who sets it off. But not now. And besides, he reminded the others with a shrug, *If that thing really is a live hopper, it'll go off over my head, anyway.*

This time, and he was close enough now to see for sure, his missile struck the target square, sending it rebounding. Still nothing. All right. Either a dud, or maybe a sleeper disguised as a hopper, but in all his years out here, he'd never come on such a thing. He turned back, signaled to the crew to bring him the containment box from the rover. It was VJ who brought it *(kid's not scared),* and he watched as Minh picked up the device, quickly ascertained it wasn't a sleeper, after all, or for that matter not a harmless rock that happened to look just like a hopper. Into the box and lock down the lid, and if the thing behaved itself, maybe they'd all make it back to the base intact.

Another day's work, that was all.

Long in Collections was happy with the shift's take. She showed the totals to Minh. This entire daytime had been productive. Even better, as far as Minh was concerned, it had been almost accident-free. Two minor suit leaks, both of them patched on the spot. But no one had gotten themselves blown up, and that was the main thing.

"And no trouble?" Long asked.

She meant the VJ kid, not the accidents. Minh shook his head. VJ was still clean and straight, as far as they could tell. But of course the kid knew he'd been watching him. Kid wasn't dumb enough to try something while he was still under suspicion.

Minh considered the matter. "I want you to take him on in Collections during the nighttime shifts. Put him on sorting or something."

"You want him working in here?"

"You've got the monitors working?"

"Well, yes . . ."

"Well, then. Look, he's had enough time to get settled. It's time. We need to know what he's going to do."

Dubiously, "I suppose."

"And try not to keep watching him."

"Like you do?"

Minh shook his head. It wasn't the same thing. He had to keep watch over the kid out there, it was his job. The safety of everyone depended on it.

He went to post the nighttime assignments.

"Collections?" VJ asked with a rising tone of disbelief. Minh caught himself thinking: no real eighteen-year-old's voice would crack like that.

"What did you think you were going to do—sleep all through the nighttime? There's plenty of work to do inside, let me tell you, kid."

"Yeah, but I thought . . ." the boy caught himself.

"Thought what?"

"Like maybe I could learn how to deactivate the mines . . . or something."

"Look, is there a reason you don't want to work in Collections? Is there some problem? You know, you can tell me. . . ."

But as always it never worked when he tried to press the kid. "I *said* there's no problem! All right? You want me to work in Collections, that's fine with me!"

You blew it again, Minh.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

But the kid duly showed up for his next shift at Collections, let Long run him through a quick course in scrap sorting, and didn't have a word to say to Minh at all.

"How'd he do?" Minh asked at the end of the shift.

"Did all right."

"No problems?"

She shook her head. Minh gnawed on his lip. Maybe their security wasn't so perfect after all, maybe VJ had figured out a way to smuggle out small snips of scrap, was making fools out of all of them. He could search him again—but then the kid would never trust any of them.

"I guess all we can do is wait," he said finally. This entire business had been his own idea, start to finish. Long had agreed to it, Admin had approved it, with the warning that the consequences, however they fell out, were going to land on his own head, no one else's. If they managed to foil a black market operation: praise, and maybe even a chance of promotion into the higher reaches of Admin. But he didn't particularly want a promotion, he liked the job he had. And that's what he was risking, if this thing with the kid went bad, if he screwed up.

Only Admin was wrong. There were others who were going to feel the consequences, no matter which way it went. And the one who was most vulnerable, who had the most to lose—it all depended on what he did next. So what if the boy played it straight, just came to work, did his job? What was the matter with that?

But just two shifts later he saw the kid coming in, late, with that evasive look to him that Minh hadn't observed for over a month, turning his face away after just one glance. But Minh knew what he'd seen, swung over to intercept him before he could get through the door into Collections, out of sight. Swung him around so he couldn't hide his face, the black eye, swollen half-shut.

Confront him about it here and he'd just lie, just deny everything, Minh reminded himself. Don't be stupid this time. "Where you think you're going, this late?" he demanded instead.

The boy pulled away. "Collections."

"Not today you're not!"

"Collections is my job assignment!"

"I make the job assignments around here, and I say you're coming with me."

"Five minutes late, and you take away my job?" the kid protested, but they both knew it wasn't about his being late.

Minh had his own workshop, an isolated chamber dug into the rock, where he'd do minimal damage to the tunnel systems if he blew the place up. A couple of dismantled devices—sleepers—lay on the workbench, and there were containment boxes on the shelves. He took down one of them, flipped open the latch. Noticed peripherally that the boy was watching him intently now, all arguments forgotten. Even, almost, the reason he was here.

"Here's your hopper. Remember?"

He did.

"Want to take it apart, see why it didn't go off? Maybe you might learn something."

"You mean it?" Suspicion. *I thought you said you weren't going to show me how to do this stuff?* But the kid wasn't going to let this chance get away.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"You're the one who found it." Minh pulled himself up into his chair, let the kid bring over another one from the corner, that he usually used to pile tools on. He warned, "You realize, we might still both get ourselves blown up here. Nothing like a dud to go off when you least expect it."

VJ nodded wordlessly.

"Okay, now this thing's a hopper, all right. Here, you see, here and here—these are the sensors. Now, I could disable them, break them. But then they wouldn't be worth anything to us. You know how valuable electronics are, we try to salvage them whenever we can. On the other hand, they might be useless already. What do you think?"

It was a test. The boy's face went tense in concentration. He finally shook his head. "I'm not sure." First time he'd ever willingly admitted such a thing.

"You can never be sure enough in this business," Minh told him. "But these are acoustic sensors. They're listening for your footsteps to come close enough to get killed. Three of them. If only one of them had gone bad, if the other two were still working, they would have set this thing off by now, wouldn't you say? If not the first time we tossed a rock at it, then the second. So, I figure it's not the sensors that's gone bad, it's the contact or the controller inside this thing."

"Unless they're all bad," VJ corrected him.

"That's the other possibility," Minh acknowledged, pulling up a fragment of magnifying glass set in a frame. It was salvage. Admin wouldn't authorize using anything more valuable in work this hazardous. As he tuned his cutter slowly to the finest setting, "These things weren't meant to be cracked open. Never meant to be disarmed. Think about it. Millions of them out there, all over the landscape. Waiting. Just waiting. A hundred years, they'll still be out there. We might all be dead by then—who knows? Maybe a thousand years, and some alien race might land here on Luna, come to look at our dead dry bones, and step on one of these things. Blow off a foot or a tentacle or whatever. The war—the damned war will probably outlive us all."

As he spoke, he was cutting along the barely visible seam where the device had been sealed. Now, peering through the glass, he aimed the cutter. "This *should* disable it. Sever this contact . . ." He held his breath, touched the trigger. A tiny flare of laser light, and nothing else happened. They were still alive.

They both exhaled together. Then Minh used forceps to free the sensor array and hooked up the delicate device to his makeshift diagnostic board. "Look," he said, "the sensors all work. It was the contact that must have been bad."

"Then it really was a dud. I mean, it never could have gone off."

"But we didn't know that, did we?" Minh carefully detached the sensor array, placed it into a small box and laid it back down in the middle of the table. He waited until the boy met his eyes. "This part, though, these sensors are good. Functional. I'd say someone might be happy to get his hands on it, wouldn't you say? Somebody who can work in electronics, or who knows somebody . . ."

The boy went suddenly tense and stiff. But Minh pressed it. "Is this enough for him? Will it stop him hitting on you, if you bring him something like this?"

"I'm not—" VJ started to protest, but at the same time, his hand had gone of its own volition to his swollen, discolored eye, betraying him.

"That's why he hits you, isn't it? That's why he pushed you to take this job, so you could smuggle stuff out to him. Isn't it?"

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"I never took anything!"

"I never said you did. If I thought you had—well, you wouldn't be here now. But I don't like to see kids abused. I don't like to see grown men using them the way he's trying to use you."

"I owe my family—"

"That's crap, kid! Who is this Venkata guy, anyway? This guy who hits you? He's been under investigation, you know that? He's a crook, isn't he? And he's trying to drag you in on it. You tell me—do you think he's not planning to set you up?"

"We have to survive somehow! Up in the warrens, how else are we going to live? On the rations Admin hands out?"

"That may be so, I won't argue with you. But you have another way to live now. And help your family. You have a job. Are you going to let him ruin that for you? Tell me—is he really your uncle?"

In a low voice, looking down at the floor, "Brother-in-law—sort of. My sister's man."

"What about the kids, the ones living with you?"

"My brothers. And my sister's kids."

"So you're supporting them all, and that still isn't enough for this guy?"

"I thought . . . it was going to be all right. I told him people were watching me, that I could lose the job. Until Rao heard I was working in Collections."

Guilt flooded through Minh like bile. He slid the sensor array further across the table toward VJ. "So would this satisfy him? For today?"

Dubious. Not reaching for the device. "But all salvage belongs to the settlement. That's the rules. It all has to be turned in to Collections. Otherwise, it's sabotage." Quoting his own words back at him.

"That's true, of course. As a general rule." Speaking very carefully. "But in special circumstances, there might be an exception. This would satisfy him, wouldn't it? Make him think you were going to cooperate now. Get him off your back for a day or so."

"I suppose."

"So you could take care of your real family—your brothers, your sister, her children."

Very slowly, VJ reached for the box, slipped it inside his shirt, all the time with his eyes fixed on Minh's, trying to read them, trying to make sure they both understood they were saying the same thing.

But the kid, Minh reminded himself, had never been stupid.

So it didn't all go quite as smoothly as Minh might have liked. One of the Enforcement types was too zealous, insisted on taking in VJ, too, when the raid hit, and it took Minh several late-shift calls to Higher Authority before he could spring the kid loose.

Still, it all worked out, and VJ was never even officially charged. "Now what?" he demanded, outside the lock-up, freed, glaring at Minh with a lot of heat, because Enforcement wasn't known for going easy on refugees and there'd been a few tense moments.

"Now what is you go back home, you come in to work next shift."

"Just like nothing happened?"

"I don't hear any complaints about your work performance. We still need people on the bombsquad. Nothing has changed there. Unless you don't want the job any more?"

He was ready to admit it, if that's what VJ wanted: *Yes, I set you up, right*

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

from the beginning. But aside from an apology, the only real thing he could do for the kid was make sure Admin didn't shove him back up into the warrens and forget him, now that they'd bagged their black market ring and everyone was satisfied. Minh was at least relieved that the sensor array wasn't the only contraband that had shown up in the raid. Strategic materials, illegal drugs, stolen goods, forged allotment cards—Rao Venkata and his associates were enterprising crooks, more ambitious than successful. To Admin, of course, contraband was contraband, but if Venkata hadn't tried to force the kid to get involved, Minh wouldn't have given his operation a second thought.

Which was why Minh was never going to rise any higher in Admin than his present position, and that was just fine with him.

"He gon' show up?" Lee asked later. "That kid?"

"I don't know." He took a long swallow of his brew, which seemed thinner than last month's, a suspicious yellowish color. The obvious joke was already making the rounds, but there was real discontent in it. People had their priorities, after all.

"I did it to help him, you know. He really did seem to want the job. I mean, not just because of this Venkata guy making him—he really did seem to want it."

"Den maybe he come back."

"Maybe." Minh thought of trying to explain it all to VJ, whether the kid really wanted to hear it. One thing he could never ask, though. *Did you know what you were doing when you gave Venkata that contraband?*

The kid wasn't stupid. The kid had never been stupid.

Minh was trying to decide whether another brew was worth it when the general alarm sounded, and a moment later the announcement: *ALL SURFACE MAINTENANCE CREWS TO MAIN SERVICE AIRLOCK. ALL SHIFTS REPORT.*

"That means me." He gave Lee a quick pat on the cheek and headed for the corridor, glad to have an emergency to distract him from his misgivings.

There were people suiting up by the time he got to the lockers, more people coming in. All shifts in one area made for crowding, too many elbows.

"What's happened?" everyone was asking. It wasn't a dome breach, or there would have been a general alarm. But was it a quake? Was it a meteorite strike? Or a bomb?

Then from among the multitude of elbows in his face, Minh recognized a figure slighter than most of the rest, making his way to a locker near his own. "You showed up."

"They said: 'All shifts report,' didn't they?"

"That's right, they did."

No time to say anything else, because here came Denofrio, and people shutting up to hear what he had to tell them. "All right people, listen up, we've got a pipeline breach, somewhere out between sections eighty and one-oh-four. Your job: find it. And remember this is not repeat *not* a clear zone. First crew, sections eighty through eighty-five, who's ready to go?"

People moved forward, Denofrio made his assignments. Minh wished he could have taken VJ. It was nighttime, and the kid was too inexperienced, but Denofrio said, "No, I want you to lead the repair crew out instead, after they locate the breach."

The integrity of the water pipeline was always highest priority. More than Orientale settlement depended on it. Recycling systems just simply couldn't keep up with the demand for water. The pipeline had once branched all the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

way from the deep ice reservoirs in the South Pole craters as far as Copernicus settlement on the Earthside, and it had always required constant maintenance. During the war, of course, it had been a primary target. Earth knew that without a reliable water supply, the settlements would surely have to go under.

Minh still remembered those years, how many times he'd gone running (he could still run in those days, he still had his legs in those days) to suit up, outside to seal another breach. How many had died to keep the pipeline intact. It didn't run as far as Copernicus any more, Copernicus settlement was dead, burned away by Earth's terrible military lasers, like so many other Earthside settlements. But the equation still held: pipeline, lifeline.

And so tonight. It was routine by now, and they had it fixed by the end of the shift. "I'll bet you've gone out on that run a hundred times by now, Minh," one of the repair crew said as they were unloading the rover, the lifeline intact again, water supply secure.

"At least," he said. At least a hundred times, just for pipeline emergencies alone. More than once in a shift, sometimes, during the war.

"Everything go all right?" Denofrio asked.

"Found and fixed," said Kim, the crew chief. "No problems. All we had to do was follow in Minh's footsteps." Kim considered himself a humorist, and ordinarily Minh might have laughed at that one, because he had in fact left footprints all the way up and down that pipeline, before and during the war.

But there was something in Denofrio's expression that stopped him. "No problems anywhere else?" he asked warily.

"One casualty. I think he's one of yours, from the bombsquad, right? Kid name of Shah?"

Minh closed his eyes. "One of mine. That's right."

He was there at the hospital when they brought the kid out of surgical recovery, and they let him in to see him because no one else had shown up—no sister or brothers.

"How are you doing?"

"How do you think?" Turning his face away. "I stepped right on the damn thing, just like I didn't know what to look for."

"It was nighttime, it was hard to see."

"I was the bombsquad man, I was the one supposed to know what he was doing. Make sure the rest of them were safe." A sound like a sob. "Now what am I supposed to do?"

"Hey, I know—you know I know how you're feeling right now. It hurts. But listen to me, it's not so bad as you might think. It's just the one foot. They'll make you another one, you'll be running around—you'll never miss it."

Bitterly, "Make *me* another foot? Waste precious Luner resources on a stinking refugee?"

Minh held out a card to him. "Here. Look at this. No, take it!"

He took it reluctantly, glanced at it—then his eyes blinked twice, as if there was something wrong with their focus. "Citizen card?"

"I took it to Admin. You were injured in defense of the settlement. It wouldn't be right, not to. So they'll fix up your leg so you can walk, and before you know it, you'll be back on the job. That is . . . if you still want it."

Frowning, "And if I don't? What then, back up to the warrens?"

Minh shook his head. "It's a valid citizen card, same as anyone else's. If you want off the bombsquad, after this, there'll be another job. Something."

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"Yeah, they always need someone to clean the methane digestors." Silence. "Minh? Why didn't you . . . get new legs. You know, back when it happened to you?"

He shrugged. "It was the war going on. Things were bad. I mean, we couldn't even keep people alive. By the time I could have gotten back onto my feet again, the whole settlement might have been gone. And then, later, by the time we could even think about things like that again, I figured I was getting along all right the way I was." He grinned, remembering. "I tried a pair of legs once, years ago. I got scared to death, so high off the ground. Felt like walking on stilts—you even know what stilts are?"

VJ shook his head.

"Well, it didn't work out. I took them off, said to save them for somebody else. But it'll be different for you."

"And you went back out on the bombsquad?"

Another shrug. "Somebody had to do it. No way to keep this settlement alive if we don't."

"Yeah. I suppose not. I mean, they're still out there, aren't they?"

"And they always will be. For as long as either of us are still alive, anyway. "Job security, kid. You can't beat it." ○

ENTROPY I: THE ORIGINAL TEXT

When Modern English is
as dead as Latin
Will it all be Greek
to me?

—Dylan Otto Krider

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

S.N. Dyer

With her typical caustic and hilarious aplomb, S.N. Dyer takes a primeval look at the meaning of . . .

ORIGINAL SIN

They say you could dress up a Neanderthal, put him on a subway and no one would notice, but it wasn't true.

Sure, he looked like some incredibly ugly Eastern European with acromegaly, sadly in need of plastic surgery. And you wouldn't really notice him, but only because your mother taught you it wasn't nice to stare. But what gave him away was the way he sat there, knapping away at a piece of flint. That, and the *I ❤ Cave Art* T-shirt.

Seeing Beth laden down with packages, the Neanderthal put his flint scraper back in his briefcase with the other Mousterian points and offered her his seat.

"Pardon me," he said, with a throaty high pitched voice, as surprising as Pavarotti doing Tweety Bird. "Pardon me, how do I get to Carnegie Hall?"

Illustration by Shirley Chan

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"And you said 'Practice,' right?" asked Patience.

"Of course," Beth replied, sipping the pallid local wine. A *vin ordinaire,* unworthy of comment. Only the French packed wine with every lunch on an anthropological dig. Much more, and Beth wouldn't go back in the cave. Ten years of digs in France had still not taught her the art of temperance. "You wouldn't expect me to pass up a straight line like that."

"It's the antibiotics," said Matt. "You always get weird dreams when you take them. Especially if you drink."

Beth nodded. Her dreams usually faded immediately after she woke, but this one had lingered, every color and image vivid, as if Toulouse Lautrec had been romping through her sleeping mind. She'd long ago given up worrying what Freud or Jung might have thought of her subconscious.

"Okay, students," Matt continued. "You've heard my wife's dream. What's wrong with it?" He stared at Patience. He did that a lot, Beth realized.

"Uh, no one gives up seats to old ladies anymore?"

Beth bristled. Granted, she was twice the girl's age, but that was hardly fossilized.

"No, man," said Indie. "No one in New York talks to strangers on a subway. Like, everyone is packing. You don't want to, you know, dis them."

Matt smiled ruefully. "Cut him some slack, lad, he's not from around here. . . . No, it's the T-shirt. Neanderthals went extinct thirty-three thousand years ago. Cro-Magnon cave art didn't start until ten thousand years later. More wine?"

They should have known that, Beth thought. She did, when she was their age. At the height of the baby boom, when students on digs had fought to be there, when you had to viciously compete for every academic plum. And she'd been female too, so to get where she was, at her age, she had to have been one of the best. . . .

Students now—Well, you took any warm body that could hold a shovel and thought it would be cool to hang out a few hours from Paris, drink wine, and get college credits. Kids whose ideas of primitive man encompassed *Encino Man* and *George of the Jungle.*

Maybe she was an old lady after all.

She held out her glass. "Top me off, sweetheart." The hell with the antibiotics.

"Elisabeth! Mathieu!"

It was their landlady Madame Lefevre, the widowed owner of the farmland about Jew's Cave, who every summer welcomed them into her home (for a small consideration). Her habitual occupations were chain smoking and complaining about the government; in other words, archetypically French.

She approached with a basket of apricots. "I thought you might like these. How does it go?"

"Comme ci, comme ca."

"Would you like to see?" asked Matt.

The old woman shuddered. "No. Your wife got me in that horrid cave once, and I vowed never again."

"You were very helpful."

"Was I?"

"Definitely." For the last nine years they'd excavated at random. It was, in a way, your typical cave with Pleistocene deposits from the last glaciation—narrow entrance hidden behind scrub, huge and rambling inside, littered

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

with the stacked strata of detritus of the last hundred millennia. Here and there one found animal bones, probably dragged in by predators. Discarded stone tools, the Mousterian points of Neanderthals and Aurignacian tools of Cro-Magnon—early modern man. Ancient hearths with fire-cracked rocks, shards of burnt bone, and carbonized plant matter. Even the rare ivory bead or two. The cave had evidently been prime real estate. One wondered: had the separate species, cave bear, lion, Neanderthal, Cro-Magnon, shared habitation or alternated, a prehistoric time share?

Then the cave had seemingly been abandoned, except for a single Roman coin and a shattered jug from medieval times, remnant of some leper perhaps, or fugitive from the Black Plague. Then another long hiatus, and bits of trash from the last War . . .

Madame Lefevre had been in the cave before, many times, a tiny mademoiselle carrying food and candles to the Jewish artist her family was hiding from the Nazis. Until the Gestapo came . . .

The elderly woman had finally returned one day the previous summer, clutching Beth's hand as she navigated the rough floor of the grotto. "This is where he slept," she said. "That was where he sat and smoked. He could not have a fire, you know, except when it was so overcast that no one would see the smoke, but he would build it here. . . ."

Afterward Beth had ruminated on the few major changes the cave had sustained in the last fifty thousand years. Perhaps a modern man, living there, might naturally gravitate to the same areas for eating, sleeping, defecation as his ancestors had.

So they had started to excavate his midden, in a sheltered corner where air flow would take the smell of trash deeper into the cave. It was an unpromising, cold area they'd not searched much before, despite a modern streambed where seasonal runoff had etched a groove through the centuries. The more recent trash—broken bottles, chicken bones, foil cigarette wrappings—were respectfully removed. Underneath—underneath, *The Past.*

There was a commotion and the French high school students piled out excitedly, led by Raoul, their science teacher. Local students did the bulk of the digging but being young and barely paid they tended to arrive late, leave early, and take leisurely meals at what they considered more civilized hours than the American lunchtime.

"Look what we found!" cried Raoul. He passed a rock to Beth. "Our old friend, don't you think? *Mike?*"

It was an oblong bit of stone. Grooves had been carved into it, forming legs joined at female genitalia.

Beth nodded and passed it to Matt, who scowled. It should have gone to him first. "An incomplete Venus figurine," he said. "Did you mark where you found it?"

"Naturally," Raoul scowling in turn. "Do you take us for idiots?"

Alpha men, squabbling over rank, Beth reflected. *Great. You can take the men out of the Stone Age, but you can't take the Stone Age out of the men.* She broke the silence. "Mike strikes again."

Last summer they had discovered several half-made Venus figurines in the trash midden, amongst the smashed bones of prey animals. Most were poorly formed, a head here with its engraved bangs, a rotund torso there, all discards. The head too oval, the breasts crooked, and most piteous, an almost decent full Venus, her rotund belly split apart by one final misjudged blow.

Cro-Magnons were not the neatest of people. They tended to leave the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

sharp flakes from tool-making where they fell, and broken tools where they shattered. Beth doubted that Cro-Magnon mothers let their children run about the cave barefoot.

So when they found these bits of statuary in the trash midden, they decided that the artist had been embarrassed by his failures. In anthropology circles the millennia-dead sculptor was known formally as *The Perfectionist Artist,* and informally as *Mike.*

And Mike was world famous now, at least to people who read *National Geographic* or watched CNN. What could be more evocative of the birth of modern humanity than art? And not the full blown exquisite art of the Lascaux cave, but the stuttering beginnings, the casualties of the struggle. How could one not be awed by the image of the hairy, reeking cave-artist stooped beside a fire, tapping away at a rock, trying to turn it into the image in his mind's eye? And, when the reality did not conform to his artistic vision, he started afresh. . . .

Matt passed the figure to Patience, who held it reverently. "It's so . . . so real," she said breathily. *Real* was evidently a compliment, at least to those raised in Hollywood.

"Real?" Beth laughed. "Mike's problem was that he just wasn't a very good sculptor. He was inept. Talentless. But he had vision, you have to give him that."

Patience looked aghast. Matt said, soothingly, "That's why he's *Mike.* Our intern last summer called him 'Michaelangelo Not.'"

"But think of it," Patience said. "He worshipped The Goddess."

She was the trendy daughter of a movie producer father and a scriptwriter mother, and all of her subsequent step-mothers and -fathers and -siblings—for the typical mating strategy in Hollywood was evidently serial monogamy—had possessed the vague optimistic political correctness of their isolated community. They had a public philosophy that was part Capra humanism, part Berkeley feminist multiculturalism, part scientifically-illiterate mysticism, all thinly layered over a substrate of complete opportunism.

"Goddess? No way!" said Indie.

The French students all nodded. They tended to agree with Indie, whom they called *Le Noir* without his taking offense—the French being a people who, despite their treatment of Haiti and their African colonies, had somehow escaped being labeled racist because they had been nice to Josephine Baker. And if it was rude to call the young man *The Black,* well, they were French. They were supposed to be rude.

The students agreed not because of the content of Indie's speech—sometimes they had trouble understanding their idol, like a previous generation worshiping the Liverpudlian Beatles—but because Indie was the hippest thing they had ever seen outside MTV. They sought baggy clothes and baseball caps and sports shoes to look like him, imitated his slang and his loose musical saunter. Someday, Beth thought, if she got too drunk on *vin ordinaire,* she might tell them the truth. That Indie's parents were academic physicians, that his education had been prep school and Ivy League, and that the closest the young man had ever been to a hood was the one on his ski parka.

"They did worship a Goddess! So long ago she hadn't even become Triple." Actually, what she said was "So long ago she hadn't even become Triple?" Patience had that annoying habit of all trendy young girls of ending statements as if they were questions. Beth thought it made her entire generation seem even more ignorant than they were—as well as being annoying as hell.

"She has a point," Matt said. Nothing Patience did seemed to annoy him,

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

which made Beth more incredulous than annoyed. "These statuettes spread all over Europe, starting around twenty-four thousand years ago. Religion could explain it, these could be like crucifixes."

Patience gave him a radiant look of gratitude.

"A fertility cult," Indie continued. "I'd buy that; back then, cellulite was healthy. But not that Goddess feminazi crap." His voice became mincing. "'Once upon a time the women were in charge and everything was okay, and then men took over.'"

Beth didn't like his tone, but she had to agree. She didn't get along with feminists who thought, like some modernization of Victorian idealism, that the world would be at peace if only women were in charge. Yeah. Women like Indira Gandhi and Margaret Thatcher, right? Beth tended to the opinion that women were violent, acquisitive scum, just like men, only too oppressed to do anything about it. She thought that, were folks like her really in charge, the results would be like Haiti during the slave revolts.

"So Goddess, no way," Indie finished.

"Way!"

Raoul whispered in French, "You see? She is just like *Clueless*." Beth didn't care much for his support either. Raoul worshipped Jerry Lewis. He was correct, though. Patience and Indie were the sort of students you got now, either poorly educated and considering TV the fount of wisdom, or the product of regimented over-education incapable of original thought. Both were ripe for exploitation and both believed everything they read on the Internet.

They certainly hadn't huddled under caves of blankets, reading about Schliemann and Troy until Mom opened the door and saw the flashlight through the covers. They hadn't read *anything*. Indie felt anthropology might be a cool way to spend the summer, like Indiana Jones excavating the Temple of Doom. And Patience, despite her Triple Goddess babble, probably thought Robert Graves was like some kind of government guy, you know? They were both just here for college credits that didn't require more thought than a journal of how they felt about digging with shovels, and a reasonable train ride to the World's Coolest City other than Seattle.

"You know my favorite theory?" Beth asked, grinning at Raoul. They'd been mildly flirting for about nine years now; nothing ever came of it but it had become habit. "Look where Mike started, what he carved first. Maybe Venus figurines are something men would carry on long stag-hunting trips. You know, sex toys. Paleolithic Playboy centerfolds."

Patience gasped and nearly dropped the stone, as if it were still greasy with the sweat of some horny caveman.

The student who had found the Venus had left a marker in an empty circle of rock. They put the figurine back and took pictures, including one of the proud students kneeling in the rubble, grimy but satisfied.

Beth backed away, watching as Indie photographed Matt standing, an avuncular hand on the French student's shoulder as he pointed to the Venus. That was probably the shot they'd release if the Venus were the most noteworthy find of the summer—the Chief congratulating his minions. Patience was gazing up at him with an expression of worship that most women reserved for church, or for stray sightings of Mel Gibson.

Beth stepped away, her eyes expertly scanning the dry stream walls, anything other than watch the Matt's Ego show. She stopped, bending down. "Hey! Hey, bring me the handpick and some light."

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Everyone abandoned the photo-op and surrounded her as she cautiously exposed the dull fragment, starting to unearth . . .

"It's an ulna," she said.

She dislodged it. The rock crumbled about the fossil. It was really just the distal end of an ulna, the part that would have connected with the wrist.

"An ibex," Matt said.

"It's human," she retorted. "Neanderthal, I suspect. Too thick for Cro-Magnon. . . . Look at this edge. It's been smashed with a tool, you can see it took a couple of blows."

Matt leaned over. "No, that's got to be tooth marks."

She shrugged. He didn't usually disagree with her professional judgment. They'd always been a good team, he the theorist and charismatic front man, she the field grunt, grant-writer, and physical anthropologist.

"We'll know more with the microscope. Wait, look, are those more fragments?"

Indie voiced everyone's question. "A body? In the trash heap? Didn't Neanderthals bury their dead?"

"Yeah, with flowers and stuff," said Patience. "They were Flower People." Beth looked up, shock temporarily overwhelming her enthusiasm at the find. My God, the girl had read a book once!

"A predator must have dragged it in here, sometime when people weren't using the cave," Matt declared.

Raoul was brushing aside pebbles. "More bone—We might have a complete skeleton here!"

Beth stood, clutching her back momentarily. Digging and stooping were not for the middle-aged. "Extend the grid over here." Everyone looked at her expectantly. She was in her element. The general in command. She waved. "The streambed exposes down about a meter from the cave floor. We go that way, discard the overburden with a quick sift. Let's go, team. We've got work to do!"

It wasn't until later, when they finally straggled back to the farmhouse near midnight, that they remembered they'd left the Venus where it had been found, in the rubble of the Cro-Magnon trash heap.

It was not a complete skeleton, it was even better. Over the next few weeks they found dozens of bones, all Neanderthal. Fragments of long bones, more complete skulls and pelvises. Men, women, children, infants. Indie named them after the Simpsons.

"What killed Homer and Marge and the kids?" asked Indie. They were looking at the day's find over wine. Both students were surprisingly squeamish. Patience would only touch the fossilized bones wearing surgical gloves, and Indie not at all.

"You're asking one of the great controversies of modern archaeology," said Matt. "Lots of theories, but no one knows for sure. Probably they just got outcompeted by our ancestors. We were better adapted to hunting and, well, just smarter."

"Or Cro-Magnon killed them," Beth said. "Human history is a long series of new species sweeping out of Africa and bingo, where'd the old ones go? *Australopithecus, Homo erectus,* they didn't all evolve, they died off."

"Infection," said Matt. "The immigrants brought lethal diseases."

"I'm sure Neanderthal flu was just as deadly to Cro-Magnon as *vice versa.*"

"Maybe they didn't fight? Maybe they mated and we're descended from them all?" Patience said.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"They probably weren't mutually fertile," said Beth. "Or didn't find each other attractive— In the real world, species don't interbreed successfully, like those happy aliens on *Star Trek*."

Patience looked crestfallen. Come to think of it, she'd once said her high school best friend was somehow related to a happily mating TV alien.

"They could have mated," Matt said soothingly, with that paternal but open lecturing style that made his classes so popular—that and his liberal grading. Beth just couldn't avoid an opening to a sarcastic retort; it was for the best, really—she was able to avoid undergrads, spend time in the lab, and just teach proseminars for the brave. "The offspring might have been infertile, like mules. The mitochondrial data from Neanderthal bones shows that they weren't our ancestors."

"But aren't mitochondria inherited from females only?" asked Indie. Again, Beth was speechless at this revelation of erudition. "So maybe only the kids of human females and Neanderthal males survived, not the other way."

Matt furrowed his brow, thinking. "I guess . . . maybe the hybrid heads were too big for Neanderthal females to give birth."

Beth shook her head. "I'd suspect the opposite, that Neanderthals had larger pelvises. Remember, their brains were bigger, if not better, than ours."

"But maybe they had shorter gestations, gave birth earlier so the hybrid heads would have been relatively larger. . . . Or wait, remember, Cro-Magnon faces retained immature features, the flat face and big head of babies. Early humans must have looked like kids to the Neanderthals. So Neanderthal men might have been attracted to Cro-Magnon women more than Neanderthal women to Cro-Magnon men. Probably, though, Cro-Magnons just found Neanderthal women too ugly."

"Yeah, sure," Beth said. "You're talking the ancestors of a species that's been known to mate with vacuum cleaners and sheep. If Cro-Magnons are anything like their descendants, they wouldn't let a truck-driver build and a heavy brow ridge keep them from sex. They'd just come home and say to their buddies, 'Hey, I was so horny last night, I picked up a Neanderthal. Man, on a scale of one to ten, she was a minus nine.' It could even have been the origin of mathematics."

No one laughed at her joke; she felt sure Raoul would have, had he been there. She put down her glass. "I'm beat. See you in the morning. Sweet dreams, everyone."

"Yeah, as if," Indie said. "I'll probably dream about cruising for babes with your subway dude."

Instead, Beth dreamed about him again. It was a singles bar, and the Neanderthal with the *I ♥ Cave Art* T-shirt was behind the counter, mixing something with an umbrella in it. But he had to chip the umbrella out of fine chert.

"Your husband doesn't deserve you," he said. "My people didn't form pair-bonds. Are you, by any chance, in estrus?"

She woke as Matt crawled into bed.

"Are you awake?" he whispered.

"Mm-hmm."

"We're making good finds," he said. "I think we're really onto something." He nuzzled her, stroked her face once, rolled over and began to snore.

Beth sighed. She knew where he'd been, she could smell Patience's expensive perfume.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

It had always been like this, ever since they'd started spending summers on the same dig. Matt and some student, like he needed a summer vacation from monogamy. And Beth pretending ignorance. She believed human females required fidelity because they needed a mate to help raise the product of their valuable eggs, whereas men had an apparently overwhelming biological urge to spread their plentiful sperm as widely as possible. So Matt was, well, just being human.

Only before, he'd sneak back to bed still passionate and make love to her. She didn't know if it was residual horniness from the illicit affair or guilt, an expression of his contrite regard. She only knew that she must have seemed very stupid to him at times, pretending passion, pretending ignorance of the strange scents and alien hairs and nail marks.

This was the up side of the waning libido of middle age, she reflected. When Matt came back now, he was content to just sleep. She closed her eyes, and hoped the Neanderthal was still waiting. She needed a sympathetic ear.

She was cataloguing the bones, examining them. It was indoor work, better for her knees. She wished she were doing this at the university, where colleagues were always popping in to admire your specimens and argue your conclusions. Here there were just Matt and the students, and Raoul, who increasingly wore a look of doglike devotion when she let him hold the bones of the district's long-ago inhabitants. He had the dilettante's admiration for the expert, and each revelation seemed to increase his pleasure, as opposed to Matt. Each revelation just seemed to annoy him.

"These breaks in Lisa's femur," she said, pointing again and again. "And Ned's humerus— These are postmortem. The sort of breaks hunters do for marrow extraction, but not like scavengers totally destroying the bones, the marrow must have been a treat, not all of dinner. And here, Bart's skull cracked opened for his brains."

"That can't be so. Predators . . ."

"These aren't teeth marks." She handed him a magnifying glass. "These are from stone tools. You see how it may take more than one blow. And there's more. The discoloration."

"The soil."

"It's not found in bones in other parts of the cave."

"Maybe the ground is more acid. The stream . . ."

"You know it's got to be from fire."

Indie and Patience had been following the conversation with the disinterest of spectators at a boring tennis match. As they finally caught on, their jaws dropped.

"Wait a minute, you aren't saying . . ."

"These Neanderthals were cooked and eaten."

"Oh, gross!"

Matt smiled. "Come on now, we already knew that Neanderthals practiced cannibalism. . . ."

"That's not proven."

He ignored his wife's protest. "Many human societies also practice ritual cannibalism, to remember fallen kin or imbibe the bravery of enemy warriors. . ."

"Ritual cannibalism is one thing. This was impatient, hungry folks pigging out on *Homo sapiens Neanderthalensis*."

". . . so why don't you kids hit the Net and see what you can learn about patterns of cannibalism?"

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Now this was something they knew—not how to pick up one of the books they'd brought, or how to charge into the library and emerge with the proper reference, but how to surf the ether. Beth watched them snatch up their laptops and squabble over the phoneline, feeling dreadfully old-fashioned, with sad nostalgia as the culture of paper faded. She felt like some old Cretan, staring in wonder at a young scribe. "*Linear B. Linear B.* Damn it, what the hell's wrong with *Linear A?*"

Patience went to Paris for the weekend, and called in a panic. Gypsies had stolen her purse.

"Good thing her passport's still here," Matt said. He was packing an overnight case.

"Well, enjoy Paris," said Beth, with a pleasant laugh. Like she believed Patience had been robbed and he was the white knight to the rescue, not that they'd planned this for an evening in the City of Lights. For an evening in the most romantic city on earth.

Or so people said. The only time Beth and Matt had spent there was at academic conferences. And the most splendid night and wonderful food tend to lose their glory when you're with rheumy old professors who insist on telling you trivial research news and asking after your rheumy mentors.

This worried Beth. Because it was one thing for Matt to sneak furtively into another tent or bedroom at night, and quite another when he walked, hand in hand, along the Seine to some candlelit restaurant. . . .

She remembered what Patience had said, last time she'd stopped to stare at the Neanderthal bones, now assembled into almost a dozen fragmentary skeletons, some only an isolated skullbase or hipgirdle.

"What do you think killed them?" Beth had asked. Trying to be friendly.

"Maybe the old just had to give way to the new?" the girl had replied.

They had all died by violence, or at least those where she had enough body to tell. By weapon-inflicted wounds. Except for the babies, and it's easy to kill babies by strangulation or breaking their necks, not leaving any record in the bones.

"You're saying they were killed deliberately?" Matt asked.

"Yes. There's no sign of ritual. Each body is treated differently, the way you'd treat struggling prey."

"They must have been starving," Indie said. "I wonder what it tasted like—probably pork. They say cannibals call us *long pig*."

"Or chicken," Matt said. "Have you ever noticed that any weird meat is compared to chicken?"

"But can you imagine eating someone you know?" Patience looked sick. "I saw this movie about a plane crash, but they were like already dead?"

"Treating someone who can talk to you as meat . . ." agreed Matt. "My God, I can't even look a cow in the eye."

"Food, Alice. Alice, food," said Beth.

Matt nodded, but the students just looked blank.

"*Alice in Wonderland,*" she told them.

They thought a minute. "Oh yeah," Patience said finally. "That was a really bad movie."

"You're right," Beth conceded. And briefly contemplated a future in which Carroll references were as extinct as, well, Neanderthals.

"There's more," she said. "The Neanderthals might have been starving, but

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

this wasn't some lifeboat sort of sacrifice. They were hunted and killed. By Cro-Magnons."

"What?"

"The wounds on Homer's scapula and iliac crest, see? Too thin for a Mousterian point. Perfect for Aurignacian. And look."

There, imbedded in the skull of what they thought was an adolescent female—a fragment of flint. Of a variety found hundreds of miles away. Only Cro-Magnon imported the raw material for their tools.

"Now we know what killed the Neanderthals," Beth said. "Our ancestors snuck up on them, and turned them into Sunday dinner."

She hadn't been in a Catholic church since she was a child, at some neighbor kid's wedding. Everything had been very grand and very alien, very Latin. This was, though in the vernacular, still incomprehensible, her French not up to it.

They had all felt vaguely unclean after her revelation, and had taken Mme. Lefevre's offer to accompany her to church. Mostly they stared at the art, the product of centuries of devotion, save various revolutions and occupations, so that the statues were devoid of gilt.

Indie was somewhere behind them, hanging with the high schoolers. But Beth looked over at one point and saw him staring obsessively at a stained glass window of Eve plying Adam with the apple. Of the first sin.

Patience made the next big discovery, she and Matt. They didn't even try to make up an excuse for why they had been alone in the cave that night, though they would no doubt come up with one by the time they gave interviews. Somehow, and no one was asking for details, they had knocked into a pile of rocks that had been leaning against a wall. A very ordinary-looking pile of rocks, only when some fell there had been the smell of stale air. . . . They'd cleared more rocks and found a narrow crawl space.

And twenty feet along it opened into another magnificent chamber, its walls covered with pictures. Here was the flowering of Cro-Magnon cave art. Aurochs and bison charged in herds along the walls, with a lonely ibex behind. A pregnant wooly mammoth brought forth her young. Horses reared and snorted, red ochre eyes almost alive. The awesome solitude and skill of the artist were almost frightening. Everyone spoke in whispers, and feared to touch.

But there was more. Along the lower walls, untouched by their ancestors except for the occasional charcoal handprint, another artist had been at work. Here were art deco figures, strolling in the Paris night; here bathers on a beach; here lovers beneath a tree, here a family *seder*. Scenes of an equally extinct past.

Madame Lefevre crawled painfully in to look. She ignored the higher paintings, as if one routinely were confronted by twenty-millennia-extinct animals. It was the modern art that brought tears to her eyes.

"Jacob," she said. "He had talent, no?"

It was the sort of find that every anthropologist longs for, the kind that expands human knowledge. And gets you into textbooks and talk shows and *People Magazine* and good nightclubs.

They all piled into their rented van and drove to the coast, fifteen miles away. It was crowded—the French having the curious delusion that everyone in the country should go on vacation at the same time—but they found a

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

table at an outdoor café with a view of the ocean crashing against cliffs. Matt, Beth, and Raoul sipped brandy and watched Indie show new dance moves to the French students; Patience sat with the elders, drinking white wine and looking down upon the dancers with vague disdain. A boombox blasted rap.

"French rap? What are they saying?"

"The usual," Raoul sighed. "The verbal equivalent of male gorillas beating their chests. Why can't they listen to something decent, like rock and roll?" He rolled his eyes. "Listen to me. Now I know how my mother felt when I played the Beatles or Jimi Hendrix."

"I could tolerate modern music up until the late eighties," Matt confessed. "Guns 'n' Roses weren't bad, and I even sort of liked Nirvana. But rap. . ." He shuddered.

"You just don't listen to the good stuff?" Patience said. "It's not on the radio."

"Tell me, what is good?" Matt asked, with a voice that his wife recognized as smoothly, manipulatingly uninterested, the voice he used when asking prospective investors about their children. He leaned closer, and she could hear them talking softly, the names of various gangstas occasionally emerging from the background, much like the isolated words she'd catch in a rapper's lyrics.

"Well, I think rap is great," Beth told Raoul. "The defining point of our generation was rock. Our parents hated it. And now kids have something we hate, the same way they dress like geeks and shave their heads to annoy us. I think the Rap/Rock boundary will be as important as the Cretaceous/Tertiary boundary."

"Ah," Raoul replied. "And we are the Cretaceous dinosaurs, and they the mammals replacing us?"

She toasted his thought with the last of her brandy, and signaled the waiter for another.

Raoul continued. "Me, I think the defining point of our generation was rebellion. Against authority and hypocrisy. I was in the student uprising of '68."

"Hey, I was getting beat up by the tac squad in Berkeley then. Remember People's Park?"

Matt suddenly skimmed away from the conversation with Patience to reenter theirs. "I was a Freedom Rider."

"You see?" the Frenchman said. "First we rebelled against our parents, now we rebel against ourselves. By becoming bourgeois."

"I burned my draft card," Matt said.

"*I* burned your draft card," Beth corrected him. "I used it to light my bra."

Patience yawned, and looked almost wistfully at the dancers. Beth had a sudden memory—Dad and his war buddies, drinking beer, talking about Normandy, and castigating the worthless younger generation unwilling to sacrifice themselves in Vietnam; Beth calling them Fascist pigs. *What goes around,* she thought.

They drove home in the sunset, drunken students piled in the back of the van like tired campers. The not-quite-as-drunk elders talked about the bones, something they'd been avoiding.

"It all just makes sense," Beth said. "We killed off the Neanderthals the way we exterminated the mammoth and the Irish Elk and the American horse and the dodo. . . ."

"Spare us the litany of extinct animals, it'll take all night," Matt said. "It's the anthropologist's version of *Ten Thousand Bottles of Beer on the Wall.*"

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"It's just so glorious," she continued. "We've solved the mystery! I mean, when I was a kid I'd read these books about what happened to the dinosaurs and Amelia Earhart and stuff like that, and now we *know*. It's, well, it's the awesome part of living at the end of this century, hell, the end of this millennium. And this mystery I solved!"

"It'll be controversial," Matt said, scowling over the wheel. "We've got to have complete proof. Otherwise we'll be crucified."

"It has to be wrong." Raoul shook his head, as if the cannibalism of his ancestors—everyone's ancestors—reflected upon him personally.

"Right," Patience said. "Because early man was peaceful. They lived in harmony with the earth and its creatures. It was only when agriculture and patriarchy came into the picture that humanity got screwed up?"

Beth bit her lip, then went ahead, no matter how cruel it sounded. "Grow up. We were never Rousseau's noble savages, corrupted by evil civilization. We weren't prehistoric flower children. We're intolerant, sexist, racist murderers now, and there's no reason to believe we haven't always been that way. In fact, those are probably even survival characteristics, intrinsic to our evolution. So we don't even have to blame ourselves for our crimes. We can just wear buttons that say *'Darwin made me do it.'*"

"But no," said Raoul. "You misunderstand me. It has to be wrong, because these Cro-Magnons were Frenchmen, were they not? And no Frenchman would eat such crude cuisine as barbecued Neanderthal."

"But what if," Beth interjected, "what if they cooked them with garlic and truffles and a little strained aurochs butter?"

"Ah," smiled Raoul. "Well, that would be different."

"You bastard, where did you put them?"

She'd burst in on Matt, who had moved into a separate bedroom a few days earlier, pleading insomnia and a need to work late. She considered this her saddest discovery: the realization that she really wouldn't miss him, didn't regret the breakup of the marriage. Except that their findings were bound to be attacked, and it would have been best to be in this with a supportive partner. Not an *ex*. No matter how amicable.

"Put what?" Matt asked. With that innocent tone that every cheating husband adopts, until it becomes second nature and he starts using it even when asked simple questions, like *did you take out the garbage?*

"The Neanderthals, dammit. You can take the house and the car and your brainless Lolita, but I found them! Those bones should be mine!"

Patience came out of the bathroom, wrapped in a blanket, regal, as if Beth's presence were irrelevant. Then she paused, looking at them suspiciously. A great entrance is worthless when no one's paying any attention to you.

"But I didn't take them . . ." Matt told Beth.

A look of panic came over them both, and they sprinted for the door.

The bones were never recovered. The van was gone, too, and someone reported seeing a vehicle like it, exploding, the ruins teetering over a cliff into the ocean.

Beth blamed someone different every day—Matt, for being too chicken to make intellectual waves, Patience, for her boneheaded New Age philosophy, the French students for a drunken prank, the local priest for trying to suppress evidence of non-divine origin, even Raoul for sweeping gastronomic crimes under the carpet.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"The art find is enough," Matt said.

He smelled endowed professorship and book deals and first name aquaintanceship with the other celebrity scientists. Beth detested him for taking the easy fame.

The last day she went down to the cave. She'd be back next year, trying the midden again, but she feared she'd not find any more Neanderthals. They'd pretty much cleaned out that area, the thin boundary zone between Neanderthal and Cro-Magnon habitation. She might find bone downstream, washed into lower chambers, but without being at the barrier it wouldn't prove anything. She had a sickening image of herself as some obsessed crone, searching caves all over Europe, trying to reproduce her serendipitous find.

Indie was by the crawl space to the cave with the art. Already the government had sealed it, to be opened only for officially sanctioned scholars, to prevent the degradation that had struck similar caves.

The young man looked sad. He was in French blue jeans, having given all his own clothes to their assistants. Beth realized that he was going back to an Ivy League university where French clothing would be much more hip than the ghetto garb he'd been affecting, but the strange almost respectable clothes made him seem vulnerable.

"It was you," she said.

"You can't prove it."

She stooped opposite him. "Why?"

He looked over at the entrance to the inner cave. "For the artist. For the *artists.*

"I just kept thinking about that Jewish guy, Jacob. He could've hidden in the back cave, but he didn't. He blocked it off. He thought what he'd drawn was so important that he died rather than let the Nazis find it.

"And then I thought about the other artists, the Cro-Magnons who drew such wonderful stuff. But their ancestors killed the Neanderthals. They were different, so they treated them like animals.

"And I wondered, is this all we are? Is genocide in our blood? Cause if it is, then nothing we do makes any difference."

Beth nodded. "Original sin, right? We rule the earth because we bought it with the blood of innocents.

"But that's religion, Indie. Religion suppresses the truth. We're scientists. We face the truth, no matter how painful, and we learn from it."

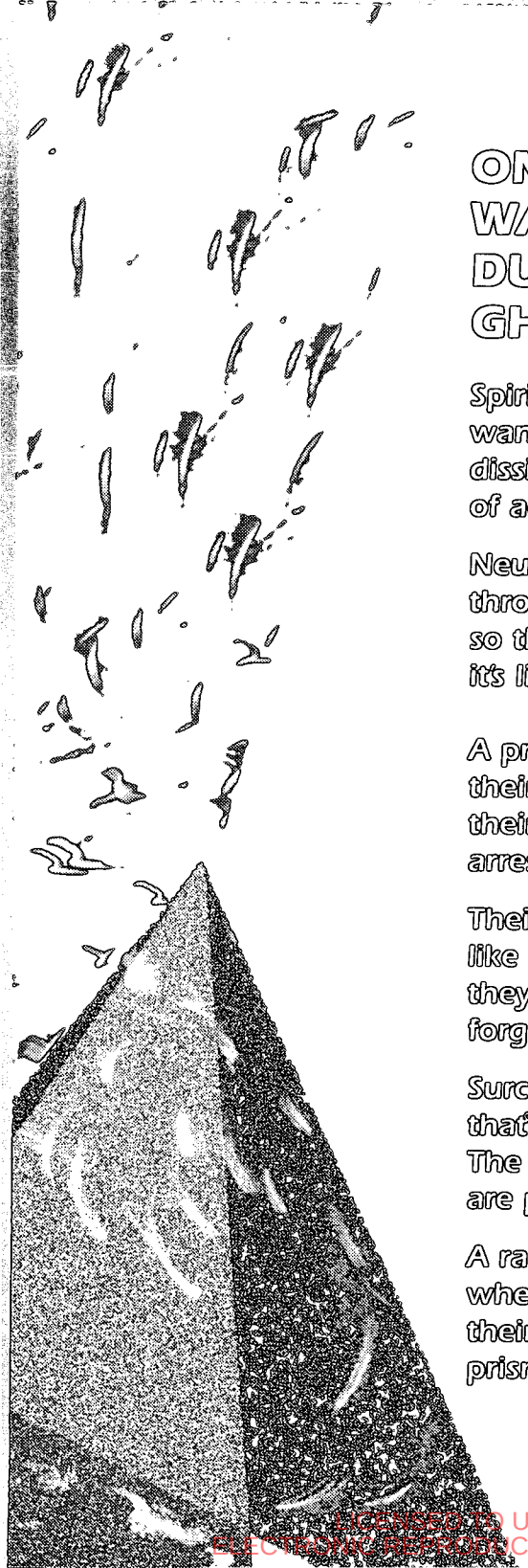
"Yeah. Sure." He began to laugh.

She turned her back on him. She was going to town to meet Raoul for a glass of wine. That was what soon-to-be-divorced women did. After all, it didn't matter how you got into your niche. Once you were there, you had to adapt to it.

She dreamed about the Neanderthal in the *I ❤ Cave Art* T-shirt again. They were back on the subway. She snuck a look at him, then he snuck a look at her. Their eyes met, briefly, for a fraction of a second. And they both looked away. ○

The author would like to thank Lawrence and Susanna Alexander, Lucy Kemnitzer, and Sharon Rose for their advice and assistance.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



ON THE WAVE-PARTICLE DUALITY OF GHOSTS

Spirits like wavicles
wander in time,
dissipative structures
of aether and mind.

Neutrinos careening
through light-years of lead:
so this, then, is what
it's like to be dead!

A prism could fracture
their tenuous waves,
their temporal passage
arrested for days.

Their chronons dispersing
like seeds from a pod,
they'd scatter in fragments
forgotten by God.

Surcease for the specter
that's trapped in the rain!
The myriad raindrops
are prisms of pain.

A rainbow is arching
where spirits are killed,
their essence refracted,
prismatically stilled.

—Keith Allen Daniels

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

LICENSED TO URZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Nisi Shawl

Nisi Shawl lives in Seattle, where she works for Borders Books and Music, unpacking shipments, teaching a monthly writing class, and running a biweekly critique group. She also volunteers with Clarion West Writers Workshop, of which she is a graduate. Her fiction has appeared in *Asimov's* and the feminist fantasy magazine, *Daughters of Nyx*. She returns to our pages with the tale of a sophisticated monster and . . .

THE PRAGMATICAL PRINCESS

(with apologies to Jay Williams)

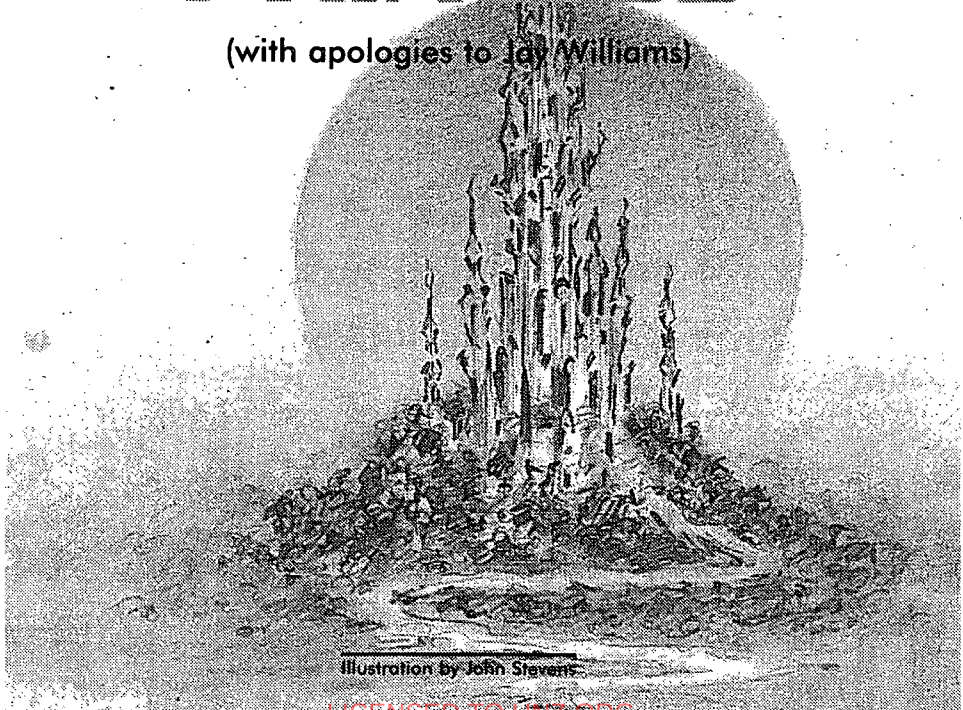


Illustration by John Stevens

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Princess Ousmani had fallen asleep in her chains, from boredom. She woke to the weight of a dragon's head resting uncomfortably on her stomach. One rough, scaly paw kneaded her left shoulder, pricking at her skin. Ousmani closed her eyes again. She did not believe in dragons, any more than in the affrits and djinns of her father's homeland, or the water-demonesses of Mali, where her mother had been born. "It is a horse," she told herself. "A large and very ugly horse." Peering out under her long, dark, lashes, she considered the dragon's glittering snout, its gleaming, golden eyes. Its irises were formed like slits, as were the nostrils inches from her own, from which an occasional wisp of steam escaped.

"You have stopped sleeping," the dragon said. It spoke French, a mountain dialect of course. Ousmani understood, though at first with some difficulty. The beast continued. "Why do you pretend? To fool yourself, perhaps, for you can see it is impossible to convince me."

The princess shrugged, then winced as the tips of the dragon's claws insinuated themselves into her shoulder. "The illusion seemed a sensible one: if I slept, I dreamt. You have spoiled it, though, and must provide another."

"Must I?" Her ribs vibrated with its voice, which possessed an odd, dry timbre, seeming wide rather than deep.

"It seems only fair."

"Life is not fair," said the dragon. "Consider, for example, your plight." It drew back its head as if doing just that.

"I must admit, it does appear to be an unfortunate one." Princess Ousmani lay chained flat on her back, close to the edge of a precipice. She was not naked, but an unfriendly Northern chill pierced her scarlet silks. It had done so all day, except for a brief, sunny respite around noon. "My only comfort has been philosophy. But then, this has been true most of my life."

"A most unprey-like speech. I grow increasingly intrigued," the dragon said, consideringly. "Let us continue this conversation in an atmosphere more conducive."

The garish head moved from her field of vision. She heard a loud hissing, felt a sudden heat in first one, then the other of her shackled wrists.

"Rise." She tried, and found she was able to sit. The chains that had run from wrist shackles to iron bolts fixed in granite now ended in red-hot, half-melted links.

The chains that bound her feet were considerably shorter. The dragon paced closer and considered them dubiously. "I should like to melt these, too, but I fear to cause you unnecessary pain. Do you suggest another remedy?"

Unlike the others, these chains ended in a common terminus, an iron staple driven into the ground. Ousmani thought back to certain Greek texts she had recently acquired for translation; in particular a work by one Archimedes. "A stout stick, I think, will make the trick. And a stone of middling girth, flat on one side."

The dragon dove off the precipice, then circled overhead on oily-looking wings to shout one word: "Patience!"

The Princess Ousmani wondered when, if ever, some other virtue would be urged upon her, such as courage or resourcefulness. She shivered, and not entirely with the cold. Despite her show of stoicism, the Princess had never really resigned herself to death. Though rejecting as false the conclusion that because offerings made to a dragon disappeared, ergo there must *be* a dragon, she had made what hasty arrangements she could to be spared consumption by more prosaically horrible beasts. Barring treachery, she had expected

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

rescue to come with the fall of night. But now it looked as though she might not be present to be rescued.

"I must just keep my wits about me," Ousmani admonished herself. "If my perceptions remain unclouded by expectations of any sort, the possibilities inherent in the moment will present themselves to me with much more readiness." So saying, she tucked her goose-bumped arms between her satin-trousered legs and amused herself with speculations as to the range of European wolves.

It was getting dark by the time the dragon returned, dropping to the ground with a rattling clatter. The source of this sound was soon revealed: a pike, a slim, straight Frankish sword, and a badly dented helm. "I hope you don't mind," the dragon said, depositing his acquisitions at her feet.

"Mind? Why should I mind? They are not exactly what I asked for, but they will do most admirably." She began scraping away the soil beneath the iron staple with the sword.

"Well, but what I meant was, the former owner of these implements is now completely incapacitated, and I thought you perhaps—"

"Might object? To the death of one of my father's enemies?" She dropped the sword and positioned the helm, dent-side down. "Or if not, of some turncoat who persuaded him to place me as I am now?" She picked up the pike, measured it against the helm and staple, moved the helm, and inserted the butt of the pike.

"We see. Perhaps you will do the favor of explaining recent political developments in greater detail."

"With pleasure, once we reach your conducive atmosphere, which I fervently hope will be a warm one." The princess gave a shiver. "And now if you will be so kind as to stand upon this pike-head, I will very soon be free." The dragon did, and it was as she had predicted. A little more scraping with the sword and the staple came up in the princess's hands.

"What now?"

"Now I will take you home."

"Is it far?" asked Ousmani, for she was hungry, cold, and despite her earlier nap, tired.

"Not far," the dragon reassured her. "But I'm afraid it will not be possible for you to walk."

The flight was a short one, and unspectacular. Evening mists obscured the view. Ousmani's only impressions were of rough, rushing winds and a bone-numbing chill, combined with the dull realization that the dragon failed to crash into any unseen obstacles. She discovered as she dismounted that the dragon's wings were quite as oily as they looked.

"You approve?" asked the dragon, as the princess gazed around its lair. A central fire revealed many-fissured walls hung with strands of jewels, and a floor of glittering white sand.

"Oh, yes," answered Ousmani, hurrying to the fire. "Now if only—" She stopped suddenly. Perhaps it would be unwise to introduce the idea of eating. Reptiles, she remembered reading, could go for long periods without nourishment.

"If only what?"

The Princess made no answer.

"But, naturally, you do not wish to appear rude. I, by corollary, do not wish to epitomize the insufficient host. If you will examine the leather wallet directly opposite you, lying against that breastplate, I believe its contents will satisfy."

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Ousmani seized the leather pouch and untied the draw-string. It held a crumbling lump of leavened bread, a withered onion, and four trapezoidal segments of some unrecognizable dried meat. Pork, probably, Ousmani thought, but she did not in the least care. It had been a day, more than twenty-four hours of the clock, since her last meal. She stuffed a brown slab in her mouth and chewed, suffusing her tongue with a delicious saltiness.

More than twenty years of training in the niceties of court conduct made themselves felt, and Ousmani spoke without thinking. "Sir, will you dine?"

"Not tonight," replied the dragon.

This ambiguous reply renewed Ousmani's uneasiness.

When the dragon saw that the princess had finished her meal, it directed her to a spring hidden in a recess of the cave. She returned refreshed and ready, as bid, to tell her tale.

"Kind Sir—" She faltered. "Or Madame, I know not which, and ought not to assume without scientific proofs—"

"Sir will do," interrupted the dragon.

"Kind Sir, then, know that I am Ousmani, oldest daughter of Musa the Magnificent, third cousin twice removed to the most merciful Caliph of Al-Andalus, Abd-er Raman. I was born of my father's third wife, Omiyinke, who also gave birth during that same night to a son, my brother Tikar. The best lawyers in Cordoba having spent several years arguing the question, they determined that as Tikar's birth preceded mine by some minutes of the clock, our mother's manumission took effect before I emerged into this world. Thus, at the age of ten, I was declared free."

A susurrus escaped from the dragon at this point, and Ousmani glanced suspiciously in his direction. "Most interesting, pray to go on," he assured her. "I was merely venting steam."

"Owing perhaps to these early legalistic associations," the princess continued, "my mind took an unusual turn for a woman. I immersed myself in scholarly pursuits, amassing a notable collection of scrolls, ancient and modern. My mother took no notice of this, being concerned with the advancement of my brother's career at court. She sent various suitors my way, but when they became discouraged by my unfeminine wit, did not press matters.

"My father, however, is a different kettle of fish." The princess paused, perplexed as to how to elucidate the nature of this paternal bouillabaisse. "Although in almost all respects a worthy man, he has a—a mania. He wants to conquer France," she confessed.

"Languedoc?" inquired the dragon.

"No, *France. All* the land beyond these mountains. He says he will be the Hannibal of the Pyrenees." Both were silent a moment out of respect for this monumental folly.

"Hannibal, I believe, failed," said the dragon thoughtfully. "And then, if he must needs conquer, the sea would seem a less toilsome route, would it not?"

"I know. But he will not be dissuaded from his course by any counsel. The Caliph gives him leave, undoubtedly to prevent my father's ambitions from being directed toward the throne. Also, of course, any progress he does make enlarges the Caliphate."

"Of course."

"And I—I must admit I was happy in his misguided happiness, for he never seemed to care what I did. Until now." She rose and circled the fire, standing before the armor of the fallen Frankish knight.

"Upon testimony of some captives that a dragon dwelled among these

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

peaks, and that it demanded as sacrifice on each of four certain days of their calendar a virgin, live, and of noble blood, he decided that to secure his safe passage into France he would offer—me." Ousmani kicked a nail-studded gauntlet, nudged it closer to the fire, watched it curl, blackening. "What better use for a heterodox daughter, long past marrying age?"

"You are—?"

"Twenty-six," said the princess. "I never hesitate to tell anyone. The delights of matrimony are beyond me," she added, in a tone of voice that indicated that for their own good they had best maintain themselves in that position.

"I comprehend," said the dragon. "That is to say, your situation now seems clear. Mine, on the contrary, is enormously complicated by your advent, and by the news you bring." He stretched, let loose another audible burst of steam, half unfurled his wings and folded them back again. "Let us see what wisdom sleep procures." Settling in the sand, he composed himself as if for the night. "Good rest, Ousmani."

Perforce, the princess laid herself down also. The sand was warm, she was weary, and soon she sunk in slumber, regardless of the threat of circumstance.

When she revived, she found herself alone and entirely uneaten. She refreshed herself at the spring, and at a little crevice further in, where she hoped the smell would be unnoticeable.

Surely, she reflected, the most reasonable moment to have attacked her would have been during her incapacitation by sleep? Therefore it seemed probable that she should consider herself safe from consumption.

But as she explored the dragon's lair her critical faculties sharpened, though not as quickly as they would have with her customary morning cup of koffi. The dying fire showed her no excreta, an absence unsurprising given the evidence of her nose. A cat could be just as cleanly, and there *was* all that sand.

More intriguing was the lack of bones. Ximonedes and all the more reliable bestiaries were emphatic in placing carnivorous middens within the confines of their constructor's quarters. There ought to be one here somewhere. Close inspection of former victims' remains might provide valuable information as to the dragon's method of attack. Did it lull its prey, or exhale poisonous vapors? And if she found no bones, how might that be interpreted?

Abandoning for the moment speculations on archaic mid-flight feeding reflexes, Ousmani dropped to her knees to examine the dead knight's armor. She found no knives or other weapons, nor anything more useful than a delicate garter of green and purple ribands, attached to the front of a padded jacket. She had heard of this immodest habit of infidel knights, decking themselves with their paramour's linens. She donned the jacket for warmth, deciding that the stains were rust, not blood. As an afterthought she removed the garter and used it to secure her lustrous black curls.

The fire guttered low, almost all embers now. The jeweled walls barely glittered. Ousmani found the leather wallet and fortified herself with more unclean meat, also consuming half the onion. The last flame died, and she was left in a red twilight.

The princess was not afraid of darkness. But conditions made a scientific program of exploration impossible. She moved her inquiries out toward the cave's opening.

It was morning. Quite early; dawn, in fact. Thin, delicate clouds the color of apricots drifted jauntily above and on all sides. And as the Princess discovered by inching out to the edge on her silk-covered stomach, they drifted be-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

low as well. The dragon's lair was indeed completely unapproachable by foot. Unretreatable, too, or whatever the complementary verb might be. She was trapped.

Ousmani sat for some time contemplating the prospect of the new day, outwardly so bright and cheerful, yet in its essence bleak. She allowed herself some melancholy, for would not her situation upon escaping from the cave be almost as hopeless as it was now? Her rescuers, followers of the Imam, had been persuaded to deliver her to the holy man's hareem. There she would live, if breath alone meant life. But her mind would stifle, smothered in layers of doctrine like muslin, light but numberless swathes of it falling upon her till she was buried, though yet undead. And her body . . . she shuddered and drew back from the cave's opening. Best not to dwell on that. There would be a struggle, between the Imam and her father, between her father and the Caliph. Her loins would be the battlefield.

Resolutely, the Princess turned her back on these problems. If life looked to be so insupportable outside the cave, she would concentrate once more on what went on within it.

Her eyes adjusted, and gradually she saw what had escaped her notice on her way to the opening: dim recesses on either side. The one on the left proved to contain logs of wood, stacked in rough pyramids. If the dragon's absence continued long, she might be glad of such a ready supply of fuel. But from what she had observed on the journey into this cold and barbarous land, she would need some sort of kindling as well.

The recess opposite appeared to be smaller, containing only a pair of moldy boots and, further in, a large, open chest overflowing with pale, cylindrical objects. These might do, thought the Princess, if they were composed of some combustible material. Hastening to slip the boots over her saffron satin slippers, which were beginning to show a bit of wear, she shuffled eagerly toward the chest. She found to her delight that its contents were indeed of a highly combustible material, but that they would not do at all for starting up the fire. The chest was filled with books.

Reverently, Princess Ousmani knelt in the sand and began sorting through the dragon's library. She found a number of treatises on obscure points of infidel doctrine; some extremely unexciting plays; that humorously inexact *History* by Paulus Orosius; *The Book of Ceremonies* from Porphyrogenitus; Dioscorides' *De Materia Medica,* untranslated, and sure to be authentic—alas that she had so little Greek—

She barely glanced up when, some time later, the dragon made its return. "Good day."

"Good day to you, Princess. I see you wasted no time in discovering my true treasure. Will you plunder me of my books, then?"

"Not I, but mice and insects have made a very good start. You should keep a cat," she said, forgetting to whom she spoke. "How came you by all these?"

"The legacy of a cleric, a plump young monk. He traveled here from Narbonne in hopes of converting me to the one true faith."

The words "plump" and "young" recalled to Ousmani that she was in the presence of an anthropophagic animal, an animal that had recently, perhaps only yesterday, slain the paladin whose weskit she now wore. She looked at him closely, searching for signs of hostility or hunger. "Of which one true faith do you speak?"

"Surely there can be only one," said the dragon, bringing his head closer in what she hoped was an inquisitive gesture.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"By definition, yes. But in my experience of religious claims they are all 'true,' and all similarly singular in this truth."

"You have a pragmatic turn of mind."

"Yes," said the princess, rolling up the scroll she held and reaching automatically for another. "And pragmatically speaking I have been throughout my life a follower of the Prophet, Mohammed. But now that I am here with you, I should no doubt subscribe to some more dragonish creed—unless, of course, the monk from Narbonne met with success?"

"Sad to relate, he did not."

"Then you must teach me all of your beliefs."

"I am afraid there will be insufficient time for that exercise."

So it would be soon. "I am not nearly so dull as I look," Ousmani asserted in a voice which quavered slightly. "You might at least attempt—" Words failed her.

"I have assessed the situation," said the dragon, "and find it to be worse than your words led me to fear. It is more than conquest your father desires; it is colonization." A gentle hiss of escaping vapors, a fitful flick of one glistening wing betrayed its agitation. "His train contains not only siege machines but seeds, not just warriors, but women. He has recruited his retainers from the inhabitants of some far Southern mountains; the Atlas range, I gather they are called."

"You discovered all this . . . how?"

"An outrider was careless, and when I captured him, rather rude. It took much restraint to—but these explanations are unnecessary." He turned his golden gaze full on her face. "I regret to inform you that your stay must end all too abruptly for my tastes."

"Really?" asked Ousmani, fascinated with dread. "It will be quite, quite quick, then?"

"No more than the time it takes to sing a roundelay," the dragon promised. "But first I must turn myself around the right way. I have never really mastered the reverse ascent." With this puzzling assertion the dragon moved into the depths of its lair. Ousmani had only a moment's wonder before it reappeared, this time with its head foremost.

"Be seated, Princess, and we will be off."

Ousmani remained where she was, cross-legged before the chest, arms full of books. She shook her head. "No. I have concluded that it would be unreasonable for me to cooperate with you in my destruction. If you must slay me, it shall be here, no matter what your custom or instincts."

"*Slay* you? You—my dear Princess, how did you manage to arrive at this deduction? Slay you? I am merely attempting to return you to your father's camp."

"I thought you were going to eat me. Like the monk."

"At first, I admit, the thought did enter my head. But soon enough, I had already supped to a sufficiency. Again, you proved so charming that the notion of you as no more than a source of nourishment became offensive. Finally, at my age, consuming large quantities of humans is a luxury I simply can no longer afford."

"Why?"

"Salt. You all have an abominably high salt content. It makes you difficult to resist, but I am convinced that the retention of fluids which inevitably results when I succumb is damaging to my delicate constitution."

While Ousmani digested this novel concept, the dragon slithered to the cave's entrance and peered out, wings flickering nervously. "This will proceed

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

the better," it suggested, "the sooner we depart. You wish to arrive before the evening, do you not?"

The Princess gathered her wits. "On the contrary," she asserted, "I see no necessity for me to arrive there ever. At any time. If you explained this before, I am afraid I missed your arguments, which I hope you will not object to repeating in all their doubtless elegance."

"Why, I—" The dragon's glittering head drew back, and a hiss of steam came from its suddenly dilated nostrils. "It appears obvious. These mountains will soon be filled with your people, who at best will be far more punctilious than the present scattered peasants in offering me a food that I know to be too rich for my health. This while removing my accustomed dietary sources through their husbandry.

"At the worst, they will hunt me down and slaughter me. Their greater concentrations betoken a greater likelihood of success."

Ousmani opened her hands and held them up as if to protect herself from this eventuality. The opportunity for research, the wasted knowledge, the sheer, strange *beauty* of the beast, lost to her father's madness. Not to mention access to a marvelous and altogether unappreciated library. "This must not happen."

The dragon smiled. "I am glad to see you agree. Princess, I must leave, and while it desolates me to deprive myself of your discourse, I cannot take you with me, for I know not where I go. I have some distant relatives in Sind. Also, in Hyperborea."

"Stay!" said Ousmani. "There is another solution, one that has just now occurred to me. The more I think upon it, the more good I see. But wait—your cleric from Narbonne, had he upon him any implements for writing, or tools with which one might illuminate a book?"

"He did, Princess, though I fail to see what use such scholarly activities will prove in the face of my persecution."

"You will see, though, for I shall show you. First, the tools. Or, no, stay—we must prepare a suitable place in which to work. A desk—I suppose a log will do, if you will roll it near the fire. And speaking of the fire, I must ask you to build it up—"

The dragon proved most pliable when apprised of the details of the Princess's plan. It kept the flames burning brightly through the entire night, sleeping but fitfully. The Princess slept not at all, but toiled without ceasing, for penmanship was not one of her areas of greatest expertise.

"Your name," said Ousmani, when the dragon put its head over her shoulder during one of its wakeful spells. "We ought to include your name, and I don't know what it is."

"My mother called me Bumpsy . . . I suppose that will not do."

"No." The princess retied the dead knight's garter, from which tendrils of black hair were escaping to daub themselves with gold and cochineal. "What of your victims? Did they construct any memorable epithets?"

"Their remarks were always decidedly insipid, dear Princess, unlike yours. 'Gaaah,' I believe, was one of the more cogent exclamations."

"Have you no preference as to how you will be styled?"

"I never gave the matter any thought. I am that which I am."

"You are the very seat of reason. I will name you Aegyptus," decided the princess. "Aegyptus was the ancient ruler of a kind and learned land called Egypt. Many defenders of the faith call this place their home. Also, it is warm there."

The proclamation of Aegyptus' conversion to Islam and renunciation of his

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

former dragonish ways was complete by mid-morning. After a lengthy nap, the Princess declared herself much refreshed, and not at all hungry. So they set off at once in order to be able to deliver the proclamation during the call for evening prayer. Unlike her previous ride, this trip afforded the Princess a splendid prospect. Partially obscured by her mount, marguerite-embroidered valleys and dazzling waterfalls fell behind her. The wide-winged shadow of the dragon's passage stained white snows with purple, scattered flocks of sheep and dark-winged birds, rippled over grey fog-banks, growing larger and more distorted with the lowering of the sun.

All too soon, the last straggling slaves and pack animals of her father's train slid into view, plodding wearily through the dust of their superiors. Next she saw a broad, marshy-looking meadow full of half-erected tents. Above the noisy wind of their passage, Ousmani asked Aegyptus to circle higher, that they might wait for the most opportune moment unobserved.

It seemed forever coming. The horses, understandably nervous due to the hovering draconic presence, took forever to settle, and the tents were pitched and re-pitched in a futile search for dry ground. In fact, the camp was still in total disarray when the piercing cry of the muezzin floated up to Ousmani's ears. But those with prayer rugs procured them and rolled them out beside those less fortunate, all prostrating themselves on the damp, green ground. All aligned with the hope of the faithful, the source of enlightenment on Earth, with Mecca and the East. "Now," shouted Ousmani in her dragon's ear, and they soared out of the West, swooping over the backs of the astonished congregation.

Circling back, Aegyptus held his huge golden wings fully unfurled, gilding them again with the light of sunset. Impossibly, they seemed to pause, and Ousmani held her breath, expecting to drop helplessly from the sky.

"There is no God but Allah," intoned the dragon into this unnatural silence. "And Mohammed is his prophet." With that he lowered his tail almost to the ground, and uncurling it, deposited the parchment scroll detailing his conversion exactly at the head of the alarmed and immobile Imam. Glancing back as they flew away, Ousmani saw him rise to stand, still reading.

"Success!" she screamed into the wind.

"Perhaps," Aegyptus equivocated. "I have my doubts." Suddenly veering, the dragon flew in an unfamiliar direction. Presently they came to the base of a steep cliff. Aegyptus climbed the updraft, circling like a hawk. Again, it was startlingly quiet.

"You are as much a Muslim as I," she tried to reassure her mount. No, her friend. "More, for you have never consumed alcohol, nor rebelled against the wearing of the veil. The scroll we left for my father tells nothing but the truth. You decided to convert because of my example."

"But even if they believe you, will they not abominate me as an—an abomination?"

Ousmani had considered this carefully, from the instant in which she formulated her plan. "Some might," she replied. "But my third cousin, twice removed, the most merciful Caliph of Al-Andalus, Abd-er Raman III, is of a liberal turn of mind. If I were you, I should prepare myself for guests. Interesting and illustrious ones."

"Of a certainty?"

"Of a complete and utterly ravishing certainty."

"It is necessary, then, that we make adjustments in the economy of our household, do you not think?"

And the dragon and the princess turned homeward to do just that. ○

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Allen Steele

THE EXILE OF EVENING STAR

This exciting new tale of intrigue and adventure out near Venus is a sequel to Allen Steele's memorable Hugo-award-winning story of "The Death of Captain Future" (October 1995). The author's last novella for *Asimov's*, ". . . Where Angels Fear to Tread" (October 1997), was nominated for a Nebula, won our Readers' Award and the Locus Award, and picked up its own Hugo award at the 1998 World Science Fiction Convention. A collection of Mr. Steele's Near Space stories, *Sex and Violence in Zero G*, should be out soon from Meisha Merlin Press.

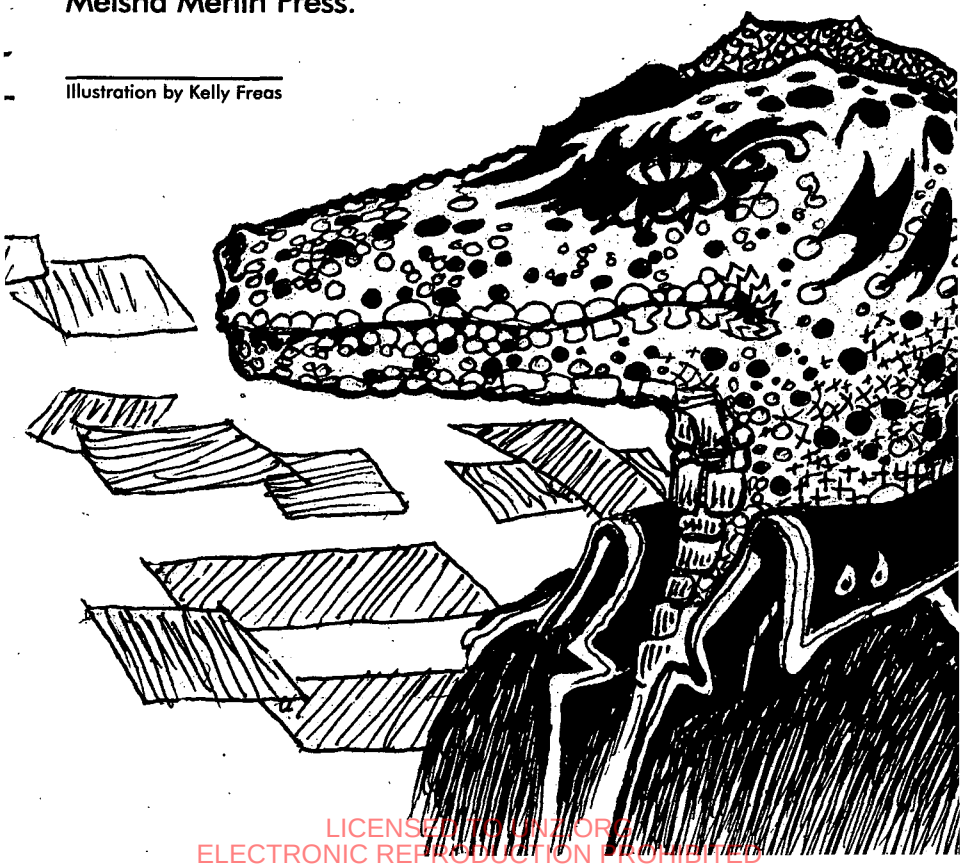


Illustration by Kelly Freas

LICENSED TO UNI.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Joan Randall ran into his arms. Tears of joy glimmered in her eyes as her soft face lifted to his. In this moment, she did not look like the cool, alert girl agent of the Planet Police who had shared more than one dangerous adventure with Curt Newton.

"Captain Future, I knew you'd come back!" she cried. "Everyone said you'd met death out there in interstellar space, but I knew you'd return some day!"

—Edmond Hamilton, *Outlaws of the Moon* (1942)

"Are you Captain Future?"

The spacer who had come over to my table was a little smaller than a fuel tank, and built much the same way: massive cylinder for a chest, head like a valve. Gold bangles dangling from his right earlobe marked him as a cloud diver, and the top of his shaven skull nearly brushed the taproom's low ceiling. How someone that huge made his way through the station's narrow passageways, I couldn't imagine; judging from the bandage on his forehead, he probably bumped into a lot of things.

"I said, are you Captain Future?" he repeated.

I glanced at Jeri. Sitting across the table from me, she looked calm as usual, but I noted that she had casually dropped her right hand so that it rested a few inches from the scabbard strapped to her left leg. That's my girl: never taking any chances, especially when we were in hostile territory.

"Depends who's asking," I replied, keeping my own hands in plain view. "I mean, I don't usually go by that handle. My former captain liked to call himself that, but he's gone now. My name's Rohr Furland, and this is my wife Jeri. And who may you be, m'sser?"

A polite enough answer, but it seemed to puzzle the big galoot. Too complex, I guess; a lot of information to absorb at once. He cast Jeri a look that seemed to write her off as a google not worth bothering with before he returned his attention to me.

"So," he said slowly, "you Captain Future or ain'cha?"

A dozen pairs of eyes burned holes in my back. When we came in, a bar band at the front of the room had been strangling cats, or at least that's what it sounded like they were doing. We'd suffered through the end of their set while we nursed our drinks and tried to pick out someone who resembled Jenny Pell from the taproom's patrons, and sighed in relief when the band finally took a break. Now I wished they had kept playing. Our friend's voice was a deep rumble that carried well in the narrow compartment; heads were beginning to turn.

And, sweet Elvis, I was really tired of being called Captain Future.

"No, I'm not Captain Future." I picked up my beer stein, but didn't bring it to my lips, and leaned back in my chair so that only the rear legs touched the floor. "Yes, the *TBSA Comet*'s my ship, and yes, it used to belong to Bo McKinnon, and I used to be his exec, sure, but that's something that happened three Gregorians ago, and . . ." I shrugged. "Look, it's really simple. I'm not Captain Future. You copy?"

The cloud diver peered at me through heavy-lidded eyes. "So you're not Captain Future?"

"No, I'm not Captain Future."

He thought this over for a few moments. Then his face broke into a grin that would have made babies scream.

"You're a dead mu'fucker, Captain Future." And then he raised a fist the size of a cargo davit and swung it at me.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

I was prepared for that. I kicked back from the table, and his fist missed me by a few centimeters as the chair toppled to the floor between my outstretched legs. The diver was caught off-balance long enough for me to bring the stein down on his noggin. The bandage made a good target and the stein was cheap ceramic; it shattered nicely and the thug sprawled across the table.

"Sorry," I said, tossing aside the stein's broken handle, "but I told you I'm not . . ."

"Rohr, look out!"

Jeri's scream made me look up, but not quite fast enough. The diver had friends, and one of them rushed me before I was finished gloating. He wasn't nearly as large as his mate, but his fist caught the side of my jaw just hard enough to put me on the floor.

He was bending down to pick up my chair—no doubt to offer me a seat, so to speak—but Jeri got to him first. My captain is pretty good with a charged rapier; she whisked its humming blade across his bare biceps and he dropped the chair as his arm went numb and started to bleed, then her backstroke paralyzed his legs and he went down.

Two large spacers on either side of Jeri hurled themselves at her, but her breed don't call themselves Superiors for no reason; she may look frail, but I've wrestled with her enough to know better, albeit under different conditions. Ducking her head to miss the ceiling, she leaped straight up in the air on her long, double-jointed legs and somersaulted out of the way. The goons crashed into one another, missing her completely as she lighted to the floor, then she slashed the rapier's tip across them and they were reduced to writhing heaps.

Someone else came at me while I was still on my back. Apparently no one on Evening Star knew about fair fights; on the other hand, is there ever such a thing? Jeri thinks so, which is why she opts for non-lethal swordplay, but I'm not as nice as she is. I kicked the chair into his groin, then scrambled to my feet in time to head-butt another clown who tried to take my wife from behind. He clutched his stomach and doubled over; a swift blow to the back of his neck and he was out cold.

So far, so good. Six down and we were still standing, everyone else in the room looked like they were beginning to think twice about taking us; although we were still outnumbered six-to-two, they were keeping their distance. For the moment, at least.

"Think we can make the hatch?" I murmured.

"Where's the hatch?" she whispered back. She was busy watching the men encircling us.

"Umm . . . I dunno." I peered through the gloom, spotted a narrow archway beneath a neon sign reading *Aphrodite's Shell*. "Got it. About ten meters starboard, other side of the billiards table."

Her blade whined softly as she swept it past her, warding off someone who was getting a little too close. "I think we can make it, if we hurry . . ."

"But don't look like we're hurrying. . . ."

"Fresh apples." She took a tentative step to the right and I followed her lead. "Ready? One . . . two . . ."

Then we charged the hatch. Screw subtlety.

They were upon us before we were halfway there. I found a half-empty pitcher someone left on a table; wasting beer is a sin where I come from, but I think Great Mother forgave me for throwing it in a fellow spacer's face. It

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

distracted him long enough for me to kick the table into his knees, and as he went down I swung the pitcher itself into the guy next to him. The pitcher didn't break, but the impact was enough to knock him across his friend, who was still trying to get up.

Two more down, and I kept running. Jeri was holding her own—who am I kidding? she was carving her way through the crowd like a hemp farmer in a greenhouse—but I was unarmed and quickly running out of tables, chairs, and beer steins. So how about a pool cue? There's one leaning against the billiards table; pick it up and see if you can make like Boom-Boom Osaka of the Tokyo Giants. The first guy I tried to slam jumped back; he came at me again, and I forgot about baseball and remembered what this thing was used for. I slammed the stick's butt into his chest and managed to knock him into the table. Caught within its negmass field, he howled as balls pummeled him from all directions.

I might have laughed if someone hadn't tackled me from behind. One second, I was on my feet; the next, my face was down amongst crumbs of fried algae trodden in the carpet. I gasped as the breath was punched from my lungs, then the stick was ripped from my grasp and a heavy boot came down on my spine.

The boot had claws on its toes. I know this because they scratched my back. Claws? Then I heard my wife yell my name from somewhere above and behind me, and I stopped wondering about clawed boots.

"Jeri, get outta. . . !"

Then someone kicked me straight to Mars.

It wasn't a very long trip. When I came back, I was being dragged along one of the station's passageways, my legs leaving tiny furrows in the carpet. My head pounded like a New Year's hangover and my left eye wouldn't open all the way, yet through the good one I could see the clawed boots I had felt on my back just before I was knocked out, marching just a couple of paces behind me.

If they were boots, though, they were the damnedest pair of footwear I had ever seen: reddish-brown snakeskin, with three long, webbed toes on each foot, each ending in a small talon. What kind of person would wear. . . ?

I raised my head a little and looked up, and saw that it wasn't a person at all. At least not in the human sense. The face above me was utterly reptilian: an elongated snout containing a wide mouth, narrow eyes with yellow pupils and slot-shaped irises, a short bony ridge running from the top of the forehead back along the skull. He—she, it, whatever—wore a blue ConSpace jumpsuit, but the sleeves were rolled back to expose scaly forearms ending in three-fingered hands, one of which was carrying a Pax Navy flechette pistol.

"Please tell me that's a costume you're wearing," I murmured.

The lizard-man glanced down at me; in reply, his mouth widened into something approximately resembling a grin, exposing a row of sharp, pointed teeth. A tendril of saliva dripped from the roof of his mouth as his forked tongue briefly slithered out.

"S-s-s-shut up," he hissed. Nope, it wasn't a mask.

"Rohr? Are you okay?"

Jeri was somewhere just ahead of me. I craned my head and looked past the two guys holding my arms, but couldn't see her around the procession escorting us down the long corridor. Now I recognized where we were: Evening Star's north axial passageway, heading in the direction of the hub. Must be getting pretty close, too; my body felt lighter.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"Right here, babe. How're. . . ?"

"S-s-shut up, as-s-s-shole!" The lizard-man quickened his pace so he could kick me in the side. One of his talons ripped a hole in my shirt and gave me a scratch. I yelped and shut up. Well, at least she knew I was still alive, and I knew likewise about her.

The corridor ended in a five-way intersection: two passageways splitting off to the left and right to the east and west airlocks, one heading straight ahead to the command center, the last two to ladder-rungs to short corridors that circumvented the hub and ended in the south axial passageway to the other end of the station. I expected them to take the corridor to the command center; now we could get all this cleared up, one way or another. A quick chat with the ombudsman, perhaps a kangaroo court; we'd be levied with a heavy fine for fighting in a public area and told to leave. No problem there; maybe Jeri and I hadn't finished our business, but I figured it was about time for us to make our departure from Evening Star.

Oh, we were leaving all right. Without any hesitation, they took the right fork and headed for the east airlock.

"Hey!" I shouted. "Whoa, wait a minute. . . !"

The lizard stepped forward to give me another kick, but I twisted aside and managed to dodge his foot. My left arm nearly came free, but the guy holding my wrist tightened his grip. Same dude I had knocked into the pool table; there was a purple welt on his forehead, and he didn't look very happy with me.

"We can work this out!" I yelled. "Just give us a fine, let us pay up, and we'll be on our way! But I don't think you want to . . ."

The human iguana kicked me again, this time hard enough to knock the wind out of me and open a deep cut in the side of my chest. Elvis, if someone was going to nanosurgically retrofit his body to resemble a reptile's, the least he could do was trim his toenails once in a while.

They dragged me around a sharp bend and halfway down the corridor, passing the dockmaster we'd met only about an hour ago; heshe gazed down at me with complete lack of sympathy. A short pause in front of the hatch leading to the airlock, then it irised open with a faint grinding sound. By now my body was so light, it didn't make sense to drag me; the two men holding my arms hauled me to my feet and thrust me into the antechamber. The bulkheads were lined with lockers containing EVA gear of both hard and soft varieties. I saw the ones Jeri and I had rented to stash our softsuits just after we had come aboard.

"Yeah, right, okay." I halted before our lockers. "We get the message. Now if you'll just . . ."

Someone laughed, not very pleasantly although with great humor, then I felt a cold oval against the back of my neck as iguana boy pressed his pistol against me. I flinched, almost turned around to fight, then reconsidered. One twitch of his finger, and a razor-sharp flechette would sever my spine.

Just ahead of me, the mob parted just a bit and I saw Jeri standing in front of the candy-striped airlock hatch. Someone was holding her wrists behind her back; she was looking down at the floor, her long braid draped over her bent shoulders. She seemed to be mumbling under her breath. Superiors don't pray—extropic philosophy doesn't allow for a God interested in human worship—but that's what she looked like she was doing. There are no atheists in foxholes, nor in airlocks for that matter.

Then an elderly woman eased her way past Jeri. I recognized her immedi-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ately: Jenny Pell, the person we had been sent to find. Her long blonde hair now silver-grey, her face wrinkled and slightly jowled, she was older than the woman in the holos the guys from Pax Intelligence had shown us, but the same individual nonetheless. My late father practically worshipped her, as did everyone who had fought under the serpent flag during the Moon War. Jenny Pell, co-founder of the New Ark Party, instigator of the Clarke County revolution, mother of the Pax Astra. It's not often that you get a chance to meet a living legend. Under any other circumstances, I would have been awestruck. Hell, I probably would have asked for her autograph.

She stepped past the mooks bracing me on either side and studied me with calm blue eyes. "Captain Future, I presume," she said at last.

"Look, I tried to tell your friend back there, I'm not . . ."

"Sorry, but your reputation precedes you." Her expression was sorrowful as she looked away. "As does mine, I'm afraid. Otherwise this wouldn't be necessary." She glanced over her shoulder at the lizard. "Frank. . . ?"

"My pleas-s-s-sure."

"Please forgive me," Jenny Pell said, "but this has to be done."

Then she moved aside and silently watched as Jeri and I were thrown into the airlock.

I fought as best I could, but there's not much you can do when you're outnumbered by Frank the Lizard and his cronies. The hatch slammed shut behind us, and I barely had time to grab Jeri before alarms began wailing and red lamps flashed.

"Hold your breath," Jeri said against my chest.

Then the outer hatch opened, and we were blown out into space.

This man was one of the great mysteries of the Solar System. Everyone had heard of him. Everyone had repeated tales of Captain Future's incredible exploits as a scientist, as a space-farer, as the most audacious of all planeteers. Everyone knew his name and that of the three strange Futuremen who were his comrades.

—Hamilton, *Quest Beyond the Stars* (1941)

Of course, you're probably wondering how we got in this mess. I'm not quite sure myself, truth to be told. However, I do know it had a lot to do with reputation: mine, Jeri's, and—perhaps most importantly—Bo McKinnon's.

You remember Bo McKinnon. Captain of the asteroid freighter *TBSA Comet,* the man who gave his life to prevent a runaway massdriver called the *Fool's Gold* from propelling an asteroid into Mars. One of the noblest acts of self-sacrifice in human history; when the Aresians erected a twice-life-size statue to his memory at Arsia Station, no one even smiled when they chiseled his self-chosen *nom de plume* into its plaque: Captain Future, after the forgotten twentieth-century pulp magazine character whose adventures he had obsessively collected.

What nobody knows is that it was all a hoax. McKinnon didn't overload the massdriver's reactors in order to prevent 2046-Barr from colliding with Mars; he was out cold on the floor of the command center when Jeri and I blew up the *Fool's Gold* with nukes launched from the *Comet*'s Navy-surplus weapons pod. Perhaps it wasn't the nicest thing to do, and we felt really bad about it later. . . .

No. Jeri felt bad about it later, but I can't honestly say I did. Yet McKinnon

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

had been infected by the same outbreak of Titan Plague that brought low the massdriver's crew, so there was no way we could bring him back aboard the *Comet* without contaminating our ship as well. What we did wasn't very noble, but it saved not only our own lives, but also those of hundreds of thousands of Aresians. In order to cover ourselves, Jeri and I concocted the tale that Bo had blown up the *Fool's Gold* himself. No one questioned us, and in the final analysis everyone came out ahead: McKinnon gained respect, which was what he wanted, we stayed out of trouble, which was what we wanted, and the solar system acquired a new hero, which was what it needed. And that was the end of the story.

For the next three years, at least.

Under common law, the *Comet* now belonged to Jeri; after the Transient Body Shipping Association affirmed her status as its new captain, she appointed me as First Mate. By then our romance had become a marital affair, so we made things official almost as soon as the ship's registry was transferred to her name. A bartender friend in Tycho City was also a licensed Justice of the Peace; he didn't have any problems about formally tying the knot between a Primary and a Superior, although damned few friends of ours showed up for the ceremony, and the ones who didn't let it be known that they weren't wild about an ape getting hitched to a google. We had a brief honeymoon on Earth—very brief: four days when we were supposed to stay for seven—before we gratefully returned to space. Earth is nice, if you happen to like high gravity, insects, and total lack of climate control. Personally, I think the place is vastly overrated.

Running the *Comet* as a family business should have been simple; just as before, our job was carrying freight out to the Main Belt, then hauling asteroid ore back to the Moon. Yet the story of how Captain Future saved Mars had spread across the system, and since Bo wasn't around to wallow in his posthumous fame—just as well, for it would have made him even more insufferable, if such a thing were possible—then Jeri and I became the heirs of not only his ship, but also his second-hand celebrity. After all, we were the crew of the *TBSA Comet,* the last ones to see him alive. The Futuremen, as he loved to call us. It wasn't long before I learned to resent that word.

A funny thing, fame. In small doses, it can be very good for you. Everywhere you go, you're never a stranger; people want to meet you, buy you lunch or a drink, clap you on the shoulder, tell you what a great guy you are. Fame opens doors previously closed to you, presents opportunities you never had before. We received so many job offers, we had to turn some down. When we sought extra hands for long hauls, we never needed to post notices at the union office in Tycho, as McKinnon did when he hired me; there were always dozens of spacers wanting to work for us, even for short-term gigs, just so they could claim that they had once served aboard the *Comet*. The Exchequer Luna upgraded our credit rating to AAA, and when we decided to refurbish the ship, a brief meeting with a senior vice-president netted us a loan of three hundred megalox, no questions asked. He even had us pose for a holo with him.

Yet fame can be also be poisonous. Everywhere you go, you're hit upon by low-lifes, grifters, and hardsuit bums of every stripe, all trying to swindle or con you one way or another. Unfortunately, I knew a lot of these guys from my lean years; it's hard to turn down someone like Lenny the Legger when you and he used to get drunk every night at Sloppy Joe's, even though you damn well know that Lenny would steal your face, or some other part of your anatomy, if he got half a chance. Others wanted us to smuggle things for

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

them: dope, art, liquor, themselves. Still others had flinty schemes for getting rich; they spoke quickly, quietly, and sometimes very persuasively. It's fortunate that Jeri was the *Comet*'s commanding officer and not I, or we might have gotten rooked very early. Some claim that Superiors have hidden extrasensory abilities, but there's no trick to it; they're simply better judges of human character.

I know. Once when we were docked at Ceres Station for a few days, waiting for some inbound cargo to arrive from elsewhere in the Belt, I decided to spend an evening at a favorite taproom. Jeri wasn't with me; she didn't drink and disliked spacer bars, but she let me have a night or two off-duty when we were in port. So there I was, sitting at the bar and making my way through a liter of Three Sisters of Pavonis when someone feminine and very much unlike Jeri sidled up to me and asked if I was Captain Future.

This wasn't the first time I had been called that. In some way I never thoroughly understood, I had inherited Bo McKinnon's mantle as well as his ship. No one had ever called my wife Captain Future, although she was the *Comet*'s CO. But Jeri was a Superior, which meant she had twice-size eyes and double-jointed limbs and tattoos over every exposed centimeter of her skin. On the other hand, I was a baseline human, so I guess I looked the part. And people need heroes.

So I denied it, as usual (save for when that bank officer requested our holo for his office shelf), and she smiled and told me that it didn't matter because I was the best spaceman she had ever seen. I wasn't doing much else except watching skunked belters armwrestle each other, so we spent some time drinking and talking, and eventually she let me know that she wouldn't mind spending even more time with me, in more intimate surroundings.

Any heterosexual male you may know—there's still a few left; they're the ones having trouble getting dates—may wonder why I turned down the lady, had they seen her themselves. Yet it wasn't only because I loved Jeri and didn't want to cheat on her; monogamy was something I had to learn, because it certainly wasn't in my soul. It was also because I intuitively knew that this woman-to-the-umpteenth-power didn't want to sleep with Rohr Furland, but with Captain Future. She was out to fuck a hero.

And that man wasn't me.

So I turned her down. I did it as politely as I could, and she accepted rejection reasonably well. No yelling, no liquor thrown in my face; she smiled sadly, finished her drink, gave me a chaste kiss on the cheek, and then she was gone. I sold the rest of the liter back to the baffled barkeep, then left the bar and went up to the surface. A quick ferry ride back to the *Comet* and I was in the wardroom, putting away hot coffee and contemplating a cold shower, when Jeri found me.

She asked me if I was okay, and I told her yes, I was just a little drunk. She asked me if I had a good time, and I said yes, just watched some guys armwrestling. She asked me if I had met anyone, and I told her no, I hadn't, I spent the evening all by myself, no kidding, really. And then she left and went back to our private quarters, and locked the door behind her.

I slept alone in the passenger cabin for the next two days.

And that's how I learned two important things. First, it's never wise to lie to a Superior, especially if you're married to one. They may not be telepathic, but their eyes can see things yours and mine cannot, including the infrared heat patterns your face makes when you're not telling the truth. And second, fame sucks.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The first point should need no further explication, but the second does, for it goes far to explain why Jeri and I came to be thrown out an airlock on Evening Star.

Down in Planet Patrol headquarters, North Bonnel was still restlessly pacing his office as Halk Anders sat grimly silent.

"If Future can't solve this thing, nobody can!" Bonnel was saying jerkily. "And if ships keep on vanishing like that—"

A clear voice interrupted him:

"What's this about missing ships? And what's happened to Joan and Ezra?"

—Hamilton, *The Comet Kings* (1942)

We had just returned from another nine-month voyage to the Belt. Pretty much the usual routine: freight going out, asteroid ore and a couple of passengers coming back. We docked the *Comet* at Highgate's outer ring, transferred the ore canisters to a lunar tug and put the passengers on a shuttle to Clarke County, and collected our fees from everyone involved. The trip added fifty megalox to our bank account, after taxes and tariffs, and we had two months of downtime before the next run.

Jeri remained aboard the *Comet* to oversee post-flight maintenance while I caught a shuttle down to Tycho City. One of the measures of success was that we no longer had to live aboard ship all the time; now we had a time-share suite on Tycho's crater wall, co-oped with a couple of other husband-and-wife freighter drivers from the Association and occupied on a rotating basis. I was born and raised on the Moon, so that little place in Tycho was something like home for me. Much roomier than the coffin-size hostel sleepers I rented during my lean years, at least, and I didn't have to scan my loxcard every time I opened the door.

This time, though, someone was waiting for me when I checked in.

Two someones, rather: a man and a woman, both a little younger than I, each wearing dark suits, sitting in wingback chairs in front of the window overlooking the crater floor. They had made themselves comfortable; Earthlight reflected off the ice cubes in the tall glasses of scotch-and-water they had purloined from the bar, and they were watching a handball game on the wallflat when I came in.

They barely looked up when I entered.

"Pardon me," I said, "but I think you're . . ."

"Shh. Hold on a sec." The guy sitting on the right held up a finger. "Watch Tsung make this point," he murmured to his companion, pointing to the screen. "There he goes . . . lays it up just right, shoots . . ."

A raspberry buzzer, followed by moans and sporadic applause from the crowd. "Told you he wasn't going to make that one," the woman said. "Tsung's good, but he's not that good."

"Hey, even the best foul up." The man lifted his tumbler, took a sip off his scotch-and-water. My scotch, my water. "He'll recover on the next turn, just watch."

No point in checking to see whether I was in the right place; the door was keyed to my thumbprint. And this couple weren't either of the ones who shared the suite. If they were squatters, though, they were most brazen pair I had ever encountered.

"Screen off," I said, and they finally deigned to notice me when the flat

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

went dark. "Security alert, please. Tell them we've got intruders, request police assistance . . ."

"Security alert override," the woman interrupted. "Code Victor Thomas one-six-four-six, mark."

"And cancel request for police assistance," the man added. His girlfriend cast him a quick smile. Oops, forgot something.

I took a couple of steps forward, stopped when her companion swiveled around in the chair. A taser lay in his lap. He didn't touch it, but it was only a few inches from his left hand. At this range, it wouldn't matter whether he was a southpaw or not. Besides, if he and she were whom I suspected they were, it wouldn't matter; the cerebral therapy they had doubtless undergone would have made them ambidextrous.

"Mind if you tell me who you are?" I asked anyway.

The woman stood up, straightened her skirt, reached into a breast pocket of her jacket and pulled out a black faux-leather wallet. "Pax Intelligence, M'sser Furland," she replied, flipping it open to give me a brief glimpse of her I.D. card. "I'm Agent Dann, this is Agent Jarvis. We're here on official business of the realm."

I've been visited by the law many times, even spent a few nights in jail for one misdemeanor or another. Cops don't make me nervous, but these two weren't cops. Pax Intelligence agents don't hack apartment locks only to mix themselves drinks and settle down to watch a handball game unless they mean business. The monarchy's constitution may allow its citizens the right of privacy, but the Second Amendment is nothing that royal spooks can't supersede when they wish to do so.

On the other hand, there was nothing these guys had on me and Jeri. We hadn't smuggled any contraband, taken aboard any passengers who didn't have legal passports. All our taxes were paid in full, no tariffs had been avoided; there were no secret bank accounts on Earth, no lox squirreled away in Aresian trust funds. The *Comet* was properly registered with the TBSA and met every standard for flight certification with the Mercantile Authority. Hell, we didn't even have any cigarettes, although tobacco possession was so widespread these days that even the Tycho cops ignored it; if there were any smokes in the suite, it was only grade-A lunar marijuana another couple had left behind.

In short, we were clean. I had nothing to fear from these mutts. Ignoring the taser in Jarvis's lap, I walked past them to pick up the tumblers. "That's good, because the realm owes me for water and ice. I'll let you have the scotch."

Agent Jarvis looked at Agent Dann, Agent Dann looked back at Agent Jarvis, and they smiled at an unspoken joke they didn't care to share with me. Not yet, at least. "Forgive the intrusion, please, Mess'r Furland," Jarvis said. "The agency will be only too happy to reimburse you once we've concluded our affairs."

"And what affairs are those?" I took the tumblers to the kitchenette, emptied them into the recycler. A bottle of scotch was open on the counter. Damn, they'd found the good Earth stuff, almost as expensive as the ice they'd used. "If you've got something to talk about, let's hear it. Otherwise, the door's that way."

Any fake warmth they had shown disappeared at that moment, their smiles evaporating like Wu Tsang's lead in the handball game they had been watching. "Please take a seat, M'sser Furland." Jarvis rested the palm of his

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

left hand on the taser in his lap as he nodded to the chair Dann had just vacated. "We have important matters to discuss."

At least he said please. "On certain occasions," Jarvis said formally as I sat down, "Her Majesty's Government finds it necessary to call upon its citizens to perform certain duties on behalf of the realm. This is one of those occasions. Agent Dann?"

Dann reached down to the floor next to me, picked up a black attaché case and placed it on the coffee table. "This briefing is being held in strictest confidence, M'sser Furland," she said as she opened it, revealing the holopad nestled within. "You're not at liberty to discuss these matters with any unauthorized parties or individuals. This includes members of the media, the Transient Body Shipping Association . . ."

"What about my wife?"

"Captain Lee-Bose has been detained aboard your ship. She . . ."

I started to rise, but Dann placed a hand on my shoulder and pushed me back in my chair. She was surprisingly strong. "Calm down, M'sser Furland," Jarvis said. "She isn't under arrest, and no harm will come to her. In fact, she's being briefed on these same matters, just as you are. When we're done, you'll be allowed to communicate with her, so that you may reach a joint decision."

"A decision about what?"

He smiled. "All in good time. Now, if you'll pay attention . . ."

He reached into his jacket pocket, withdrew a fiche, and slipped it into the holopad. A humming cylinder of pale blue light rose from its surface: suspended within it was a pale orange planet. A tiny object was orbiting above its equator. "Ever visited Venus?" he asked casually.

I had the distinct notion that, if I ever had, he would have known about it. "Nope. Not my idea of a vacation spot."

He must have thought that was funny, because he laughed out loud. "No one ever goes there for a vacation, M'sser Furland. In fact, of all the worlds in the inner system, only Mercury is less frequented. But people do go there, and when they do, this is where they end up."

He touched the pad's base and the object orbiting Venus expanded, becoming a wire-model image of a space station: a long tube with four General Astronautics hab modules attached to its ends and several more clustered at its midsection, like a barbell with a pregnant hump in the middle. "That's Evening Star, an industrial mining station established in aphrosynchrous orbit above the Venusian equator. ConSpace completed its construction about a year ago. It . . ."

"Hey, look, I may have been spending a lot of time in the Belt, but that doesn't mean I'm . . ."

"Please." Jarvis raised a finger. "I realize that you've probably kept up with current events, but there's certain aspects that haven't been on the net. If you'll let me finish. . . ."

I shrugged, and he went on. "ConSpace, of course, is the remnant of the Earth-based space consortium that built Clarke County and established the original lunar mining operations at Descartes before . . ."

"Independence, the revolution, yeah, right. My dad fought in the Moon War." I could have mentioned that my old man died regretting having supported the New Ark Party, a consensus government so weak-kneed that it was easily toppled by a gang of right-wing reactionaries. You don't say things like that to card-carrying Monarchists, though, and I was already neck-deep in the proverbial septic tank. "Can we skip the history lesson?"

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Jarvis ignored me. "Several years ago, ConSpace decided to reassert itself by commencing mining operations on Venus, the only planet within the inner system. . . ."

"Besides Mercury."

"Besides Mercury," he added impatiently, "that isn't in the realm." He neglected to mention Mars, but most Monarchists don't like discussing Mars these days. Those upstart Aresians; imagine their unmitigated gall, seceding from the Pax Astra to form an alliance with the Jovian colonies . . . which themselves had been originally established by ConSpace, I hastily reminded myself.

I glanced up at Dann, who was still hovering above my shoulder. "Say, would you mind getting me a drink? I think there's still some scotch left, if you didn't use it all." She gave me a drop-dead look, then turned and walked into the kitchenette. When I looked back at Jarvis, his left hand had once again returned to his taser. "Aw, c'mon," I protested. "I'm not going to try anything. Just thirsty, that's all."

An impatient sigh, then Jarvis touched the pad again. Tiny white spots appeared across Venus, most of them concentrated in the equatorial zone below Evening Star. "ConSpace's mining operations on the Venusian surface are controlled from orbit, by VR pilots often referred to as cloud divers. They downlink with ground-based 'bots that scoop up various metallic oxides from highlands regolith and load them aboard landers that, in turn, transport them back to Evening Star. Profits have been marginal at best, considering the overhead costs, but they've been enough to sustain Evening Star for the first four quarters of its operation."

And that probably irked Parliament nearly as much as losing Mars. The space companies on Earth were the Pax's oldest foe, their mutual animosity going back long before I was born, yet the Pax had dismissed Venus as a hellhole not worthy even of scientific exploration. Now ConSpace was making money from the Pax's own backyard. Queen Macedonia was probably spitting soup over this.

"I imagine Her Majesty is . . . rather upset." The faint rattle of floating ice cubes behind my back told me that Dann had brought me my drink. I raised a hand without looking, felt the cool tumbler against my palm. "Blessings to the Queen," I quickly added.

"And all her loyal subjects," Dann said formally. Jarvis gave a perfunctory nod.

I tasted my drink. Too little scotch, too much water. "So why are you telling me all this? "

"If you're such a history buff," Jarvis said, "perhaps you can identify this person."

He touched his remote again. Venus and Evening Star vanished, replaced by a rotating head-and-shoulders shot of a woman. Mid-thirties, long blonde hair, intelligent blue eyes. Pretty, but not beautiful. Oddly, she sort of looked the way Jeri might if she was a Primary. Something about her was familiar, but . . . "Never seen her before," I said.

"Her name's Jenny Pell. Currently, she's the general manager of Evening Star. Before that, though, she was a senior member of Congress, representing New Ark Party . . . which, I hasten to add, she helped form."

"Wait a minute . . . was she. . . ?"

"Pell is her maiden name. When she was married, her last name was Schorr." Jarvis nodded toward the holo. "Perhaps you may remember her now."

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

I whistled under my breath. Yes, now I knew who she was. Jenny Schorr, the former wife of Neil Schorr, Prime Minister of the Pax Astra. But before that . . .

Oh, mercy. Now we were talking serious history.

Neil and Jenny Schorr founded the New Ark as an agrarian commune on Earth during the first half of the century; when the old consortium opened its Lagrange colony in 2048, it invited the New Ark to relocate from New England to Clarke County, where they established the colony's agricultural community. But the New Ark resented the consortium's autocratic rule; although Neil Schorr sided with the Earth companies, the following year Jenny Schorr instigated the revolution that ousted the consortium from Clarke County and ultimately led to the formation of the Pax Astra.

Their differences caused the couple to divorce shortly after the Pax revolution, with Jenny assuming once more her maiden name. Although Neil Schorr remained in Clarke County, he was no longer the leader of the New Ark, which had now become the colony's major political party; Jenny Pell, on the other hand, was elected the first Speaker of Congress. Yet over the next seventeen years the Pax gradually stagnated under the New Ark's utopian attempt to govern by mutual consensus of all its citizens. A new opposition party, the Monarchists, which favored replacing democracy with constitutional monarchy, gradually gained popular support. In 2066, Schorr and a small group of disgruntled former New Ark members, including one Macy Westmoreland, staged a bloodless *coup d'etat* that overthrew Congress. When Westmoreland was crowned Queen Macedonia, her first act was to install Schorr as Prime Minister; her second was ordering Jenny Pell arrested on charges of high treason.

Pell somehow evaded capture, and fled Clarke County along with a group of New Ark loyalists. They made it safely back to Earth, and for a short while she waged a public crusade to convince the United Nations that the Pax Astra's new Monarchist government was illegal and that Earth should intervene to restore the New Ark Party to power. But the U.N. remembered its humiliating loss to the Pax during the Moon War fifteen years earlier, so it didn't have much sympathy for the instigator of the Clarke County revolution. Jenny Pell was ignored, and eventually she faded from sight.

"I thought she was dead," I murmured.

Jarvis shook his head. "No, she's very much alive, and employed by ConSpace now." His lips curled in distaste. "Ironic, of course, that she would go to work for the very people she once opposed. Traitors tend to have shifting loyalties, though, so perhaps it makes a certain kind of sense."

You could believe that, if you didn't question the version of history taught in Pax public schools. The same stuff was drilled into me when I was a kid, but I also grew up hearing Dad talk about Jenny Pell: how she was the mother of the Pax Astra, only to be betrayed by her own husband. Like so many Moon War vets, my father carried a torch for Jenny Pell to his dying day. He might have been an alcoholic, womanizing loser, but I believed Dad's eyewitness testimony far more than my schoolfiches, which tended to portray Neil Schorr as the fearless leader of the 2049 revolution and his former wife as an liberal opportunist who brought the Pax Astra to ruin.

"C'mon, she must be an old lady by now." I took a sip from my drink, put my feet up on the table. "Probably needed a job, and ConSpace hired her. No big deal."

Jarvis scowled. "We . . . seem to have a difference of opinion, M'sser Fur-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

land. This isn't the sort of thing one would expect to hear from a loyal subject of the Queen."

Whoops. Forgot for a moment with whom I was dealing. "I'm just saying that she doesn't pose much of a threat to the Pax. To us, I mean."

He shook his head. "The treason charges against her are still outstanding, as is the warrant for her arrest."

"Which brings us to the purpose of our visit," Dann said. "We want you to apprehend Jenny Pell and bring her back to Clarke County."

I had just taken another sip from my drink; it almost ended up in my lap. I forced myself to swallow as I looked at her. "You've got to be kidding."

Sure she was. Every gag has a punch line, and this was it. These guys weren't really Pax Intelligence agents; they were actors hired by old drinking buddies. Something the guys at Sloppy Joe's souped up one evening. Hey, Rohr's coming back from the Belt next week. Let's see if we can make him crap in his pants. As practical jokes went, this one was a killer.

"Very funny." I chuckled as I reached back to swat Dann's knee. "You really had me going there."

If this was the moment she was supposed to open her blouse and tell me that all this would be mine if I went to Venus, it didn't happen. Dann gave me a cold stare, then removed my hand. She didn't do it gently, but at least she didn't break any bones.

"We're not joking, Mess'r Furland," Jarvis said quietly as I massaged my wrist. "We want you and your captain to go to Evening Star, find Jenny Pell, and place her under arrest. You will then take her aboard your ship and escort her to Clarke County, where she will face trial on charges of high treason against Her Majesty and the Pax Astra."

Damn. They were serious. This wasn't something cooked up by the bros at Joe's. I let out my breath, then removed my feet from the table and carefully placed my drink where they had been resting. "So why not go after her yourselves? Why are you coming to me?"

Jarvis raised a finger. "First, neither we nor anyone else from Pax Intelligence can go to Evening Star because it isn't part of the Pax. Doing so would be a clear violation of the Treaty of Mare Tranquillitatis, since it expressly forbids any actions by the Pax against Earth-based space companies." He raised another finger. "Second, although both you and your wife are Pax citizens, your ship is TBSA registry, which means that any business you conducted on Evening Star would be outside Her Majesty's purview. . . ."

"And you'd have complete deniability if we were caught," I finished. He smiled and shrugged noncommittally. "That doesn't answer the question. Why us and not someone else?"

"Oh, come now." The smile became broader. "Surely you're aware of your reputation. You're the Futuremen. The gallant crew of the TBSA *Comet*. . . ."

"Something we've been trying to live down."

Jarvis shook his head. "Not when it's suited your purposes, you haven't. In fact, many people have come to refer to you yourself as Captain Future. You haven't taken any great pains to deny that, either."

"Hey, cadging a drink is one thing. Kidnapping a station manager . . ."

"An indicted traitor . . ."

". . . is another, and you still haven't told me why you want us to . . ."

"Because it will clearly demonstrate that the Pax is capable of reaching across space to apprehend any individual who poses a potential threat. Having a couple of heroes do the job is far better than relying on spies. Once

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

you've brought Pell back to Clarke County, Her Majesty herself will publicly commend both you and your wife for your patriotic efforts on behalf of the realm. You'll not only be handsomely paid for your work, but you can probably expect to receive knighthoods as well." Jarvis shrugged again. "See? Not such a bad deal after all."

Oh, no. All we had to do was fly to a station neither of us had visited before, locate its manager, abduct her, and spirit her back to the Pax. Besides the fact that kidnapping is a bad thing to do—funny how people tend to use patriotism to excuse their misdeeds—it was entirely possible that someone on Evening Star would dope out what Jeri and I were planning even before the *Comet* made orbit.

"Sorry, but no. Won't do it." I reached forward to pick up my drink. "Please give the Queen my best, but we're not in the covert action business. You'll have to hire someone else."

"You're sure about this? Quite positive?"

"Absolutely. Not our line of work. Sorry."

He sighed expansively. "Well, I'm sorry, too, M'sser Furland. It just means that we'll have to place you and your wife under arrest for the murder of Bo McKinnon."

I had just picked up the tumbler. It slipped out of my hand and fell to the floor, spilling watery scotch and half-melted cubes across the carpet.

"Mutiny, too," Dann added. "Don't forget that."

"Oh, yes. Right. Thank you." Jarvis casually picked up his taser. "Under authority of Her Majesty and the royal government of the Pax Astra, you are hereby placed under arrest. Any further statements you choose to make shall be recorded and may be used as evidence against you during . . ."

"Wait a minute!" I started to get up, and froze when Jarvis leveled the taser at me. "What are you. . . !"

"Captain McKinnon didn't commit suicide," Dann said quietly. I didn't have to look back to know that she had pulled her own taser. "In fact, he was probably still alive aboard the *Fool's Gold* when you and First Officer Lee-Bose launched four nukes from the TBSA *Comet*."

"Clearly an act of murder," Jarvis said. "Considering that McKinnon was the *Comet*'s commanding officer at the time, it also constitutes an act of mutiny." Again, the humorless smile. "It's possible that you may have committed piracy by boarding the *Fool's Gold* without authorization of its captain and crew, but that's something we can let the court decide."

"Now wait just a goddamn. . . !"

"I imagine your first question is, 'How do we know?' Well, you see, that story you told everyone always smelled a little fishy, so some of our people did a little checking. They found some old records indicating that Captain McKinnon had previously purchased a surplus Royal Navy weapon pod and had it installed aboard the *Comet*. Then we checked net footage of your ship after it rendezvoused with Highgate. Surprise, surprise . . . no pod."

Shit. I'd bribed a Pax bureaucrat to destroy all records of the pod's purchase and installation, but apparently he hadn't done as thorough of a job as I had been led to believe. The goons must have ferreted out some backup files he had neglected to erase; either that, or my pal had knuckled under interrogation.

"Now look, M'sser Furland." Jarvis placed the gun on the coffee table, relaxed in his chair once more. "It's a simple choice, really. One way, you do a job for us. Not a simple job, to be sure, but in the end you'll come out ahead. A few more megalox, possibly even a knighthood. The other way, you'll go on

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

trial for murder and mutiny, and your story will debunked as the worst hoax of the century. You lose your ship, your reputation . . ." He shook his head sadly. "Probably receive the death penalty. You're a tough man, yes, but do you really want your wife to take the long walk? I don't think . . ."

"Okay, enough." I shook my head. "You've got me."

He cocked his head. "Pardon? I don't understand."

I let out my breath. "You've got me. I'm in. Whatever you want me to do . . ." I hesitated. "So long as Jeri agrees. She's the captain. It's her call."

Jarvis looked at Dann. I heard her turn away, murmur something I couldn't make out. They had a standby comlink with the *Comet;* another pair of PI agents had probably been working over Jeri while Jarvis and Dann were sweating me, no doubt. There was a long pause, during which I got to admire the view from the windows. A shuttle lifted off from the crater spaceport, a small sphere rising above pockmarked grey wastelands into black, star-flecked heavens. I would have swapped my soul to have been aboard it. But my soul wasn't my own anymore, so even fantasy was no longer an option.

Jarvis nodded ever so slightly, then he looked back at me. "Captain Lee-Bose has given her consent. You married a smart woman. My compliments."

"You told me I'd be able to talk to her."

"If you wish. She'll only reiterate everything we've discussed." He stood up, tucked the taser into the shoulder holster under his jacket. "Her Majesty appreciates your cooperation. Sorry to have disturbed your privacy. We'll get in touch with you tomorrow regarding details."

He turned and started walking to the door. "Nice place you've got here," Dann said as she followed him. "Thanks for the drinks."

"Sure," I mumbled, "no problem."

Another lie. This was definitely a problem.

Soon the Comet *was screaming down through the clouds into the clear, moonless Venusian night. Curt's instruments had not misled him. Below stretched Venusopolis, sprawling between the dark inland marshes and the tossing Western sea.*

—Hamilton, *The Seven Space Stones* (1941)

The TBSA *Comet* launched from Highgate a week later. As soon as we cleared the station's outer ring, I told the Brain to plot a Hohmann trajectory that, for the first time in either my life or Jeri's, would take us closer to the Sun rather than further from it. The AI set course for Venus without question; the same couldn't be said for its masters.

It was a relatively quick flight—forty-two million klicks in eighty-three days, a little less than half the time it usually takes us to get to the Belt—and we argued almost all the way. No, we shouldn't be doing this; yes, we should have told the Pax to take a hike; no, abduction wasn't legal; yes, we should have hired a lawyer; no, we wouldn't have found one who would have taken on Her Majesty's Government; yes, we should have fought this; no, we didn't have any other choice. The only issue that wasn't open to contention was that we were screwed if we did, and double-screwed if we didn't.

And all the while, Venus slowly grew in size, becoming a little larger through the cockpit windows with each day that passed. Of all the worlds I've visited—Earth, Mars, Ceres and the other major asteroids of the Belt—Venus ranks as the most banal, if only because of its apparent lack of surface

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

features: a washed-out yellow orb, with only the slightest shadowing of its upper atmosphere along the limb, as plain as a ball left out in the sun for too long. Standing watch in the cockpit, I amused myself by idly scanning the planet through ultraviolet filters; then it looked a little more interesting, all those reddish-orange cloud bands making it resemble Jupiter's half-pint cousin, but even so it remained as stupefying as a Daughters of the Lunar Revolution tea party.

On the other hand, the *Comet* lacked the radar imaging equipment that would have penetrated those dense clouds and shown me the face beneath the veil. Beneath that placid lemon sky was a kind of hell that a devout Orthodox Christian would have immediately recognized: average temperature 735 degrees Kelvin, atmospheric pressure 1,260 psi, sulfuric acid for rain, perpetual twilight even at high noon. Mining 'bots specifically designed for this environment, resembling German tanks from World War I but made of ceramic alloys instead of steel, tended to operate for a few days at best before they broke down and had to be replaced. Only nine people had ever set foot on the Venusian surface, and five of them were still down there.

And orbiting the evening star was Evening Star, a silver toy some bright kid might have cobbled together from bits and pieces of spaceship models. Which pretty much summed up ConSpace's design philosophy; instead of building another wheel-shaped space station or even a Bernal sphere like Clarke County, the consortium went cheap and erected Evening Star from surplus hardware, cannibalizing the very ships it sent out here for their hab modules, solar panels, stabilizers and telemetry equipment, until they got something that resembled a bat-winged crowbar giving birth to sausages. Ugly, mean, and efficient: just the thing for Venus.

A couple of other freighters had established orbits within a hundred klicks of Evening Star when we entered its traffic grid; they were either taking on cargo or dropping it off, so the *Comet* was in good company, despite the fact that it had never before been seen in this part of the system. Our friends at Pax Intelligence had already taken care of that little detail, by arranging for the *Comet* to win an open-contract bid to schlep six hundred tons of aluminum and magnesium ore back to Highgate. It wasn't often that TBSA freighters made the Venus run, but not so unlikely that it should have raised attention. If anyone asked, we would claim that the Belt was getting a little crowded lately, and we were testing the waters in another part of the system.

Great plan, except for one problem: despite all that fighting and feuding on the way out here, Jeri and I still didn't have the foggiest how we were supposed to kidnap Jenny Pell. Jarvis had a given us pocket-size syringe-gun containing an ampule of chloral hydrate, which he assured us would render her unconscious if we shot it into her neck, or we could remove the ampule and slip it into a drink. Nice idea, as dirty tricks go, but how were we supposed to get her off Evening Star once we had knocked her out? It was quite possible someone might notice an unconscious woman being dragged through the station corridors.

"We're just going to have to make it up as we go along," Jeri said. We were in the main airlock, suited up and waiting for the station ferry to rendezvous with the *Comet*. "Maybe we can get her to have a drink with us, then . . ."

"Dose her in public? And what happens when she collapses?"

"Say she's sick, then pick her up and carry her to the infirmary." She shrugged. "On the way we detour to a lifeboat bay, steal a pod, and carry her back here."

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"And if there's someone with us?"

"Let me take care of them." Her rapier was sheathed on her belt. It wasn't uncommon for spacers to go armed when visiting new stations, and we hadn't been told that Evening Star had a no-weapons policy. "I'll let you carry her."

"Umm, I dunno . . ." There was a hard thump as the ferry nestled against the *Comet*'s docking collar, then a slow hiss as the airlock equalized pressure with that of the other vehicle. "Look, there's got to be another way. Maybe we can get her to come aboard voluntarily."

The butterfly tattooed across her face furled its wings ever so slightly. "And how do you propose to do that?"

"Uh . . . invite her over for dinner?"

Fifteen minutes later, the ferry mated with the station's east airlock. Its pilot, an acne-scarred kid almost young enough to be my illegitimate offspring, had said little to us on the way over, save for a self-conscious attempt to try out his Superior patois on Jeri: *downside Venus, no come before, hey?* and all that jazz. Jeri doesn't talk that way around apes, so she responded with a few incomprehensible phrases that hadn't yet entered the Primary vocabulary; that shut him down, and he remained quiet the rest of the way. I tossed him a centilox tip as we climbed out, just to make sure there weren't any hard feelings.

We rented a couple of lockers in the ready-room and ditched our softsuits, then entered the station. A short, barrel-chested figure with a datapad awaited us in the passageway outside the airlock. It was almost impossible to tell whether heshe had originally been male or female. "Name and rank," heshe said without preamble, hisher reedy voice offering no clues. Why are all androgynies bureaucrats?

"Lee-Bose, Jeri. Captain, *TBSA Comet*."

"Furland, Rohr. First officer, *TBSA Comet*."

Hisher stubby fingers tapped rapidly at the pad. "Nature of visit?"

Kidnapping, I was tempted to reply. "Transport of cargo to this station," Jeri said, just as officiously. "Picking up cargo bound to Highgate."

"Personal I.D.s, cargo manifest, and vessel registry." The dockmaster held out hisher hand without looking up from the datapad. "Are you carrying any contraband such as drugs, unregistered weapons, untaxed liquor, and/or any other items proscribed under Article Three of the Descartes Convention, or transporting any individuals not a member of your ship's crew?"

"No, we're not." Jeri handed over her I.D. and the other cards.

"Unless you count ten kilos of heroin and a dozen underage . . . ow!"

I dropped my I.D. as Jeri kicked my right ankle. The dockmaster effortlessly plucked it from the air before it hit the floor. Swift little neut, even in one-tenth gravity. "Please refrain from levity regarding these matters," heshe said stiffly, passing the cards before hisher scanner. "Evening Star takes pride in being a vice-free station, and our general manager is not fond of . . ." heshe cast me a quick, baleful look, ". . . visitors making jokes at our expense."

"Many apologies," Jeri said. "My first mate meant no offense."

"No. Sorry. Didn't mean it." I stood on one foot, massaged my ankle. Damn, Jeri could sure be a bitch when she wanted to be.

The dockmaster nodded, accepting our apologies with aloof detachment as heshe continued checking off hisher list. Two more spacers fresh off the boat from Highgate. Heshe could forgive and forget a little bad humor, so long as we'd filled out all the proper forms. "We've never been here before." Jeri said after a moment. "Nice to see a station that isn't . . . well, corrupt."

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"Thank you. We try to do our best." A slight thaw in hisher voice.

"In fact, who's your GM? I'd like to meet him . . . her. Maybe buy her a drink."

The dockmaster looked up from hisher pad. I pretended to study the walls. Jeri was coming on too hard, too fast. I would have liked to nudge her, if not return the kick in the shins.

"She's usually not available," the dockmaster replied, "but most of the crew usually spend their off-duty time in the taproom."

"The taproom? Where's that located?"

"Module N4, located at the end of the north axis." Heshe nodded to the left. "Aphrodite's Shell. Just follow the signs." Heshe hesitated. "If I happen to see the GM, I'll tell her that you'd like to meet her. Perhaps she can find time in her schedule."

Jeri gave himher a sweet smile. "Thank you, I greatly appreciate it." She hesitated. "In fact, I'd like to invite her over to my ship for dinner, if that's at all possible."

The dockmaster's expression was so glacial, even the Maxwell Montes volcano couldn't have melted it. "It's our first visit here, after all," Jeri added. "I'd like to establish a good relationship, should this voyage turn out to be sufficiently profitable. And my first mate is a very good chef."

God, she had nerve. And she was a liar: I couldn't boil an egg without a cookbook. "Yeah, we'd love to have her over," I said. "I was planning on making omelets tonight."

"I'll be certain to pass the invitation along." The dockmaster handed our cards back to us, then stepped aside. "Welcome to Evening Star. Enjoy your stay."

When we were further down the passageway, I glanced over my shoulder to make sure we were out of earshot. "Remind me not to think aloud in your presence," I murmured.

"It wasn't a bad idea," Jeri said softly. "She may even go for it. Every station manager I've ever met complains that they feel cooped up after awhile. If this gives her a chance to get away from . . ."

A sphincter hatch we had just walked past suddenly opened, and a young man wearing a ConSpace jumpsuit nearly bumped into us as he came out. He excused himself as he sidestepped to the right and started walking back the way we had just come. The hatch started to close, but something within caught my attention. I quickly passed a hand in front of its eye, keeping it open for a moment longer.

The compartment was long and narrow, and almost totally blacked-out save for the amber illumination of a wallflat. It displayed a real-time radar map of the Venusian surface; tiny white spots slowly moved across its equatorial zone near the rugged highlands surrounding volcanoes and vents, which glowed red-hot against the rust-colored background. Silhouetted against the screen were a half-dozen figures reclining in couches, wearing bowl-like HMD helmets, their hands grasping Y-shaped control yokes suspended above their chests. Cloud divers, manipulating telerobotic mining equipment on the planet far below. For all intents and purposes they were on Venus, driving enormous vehicles across blistering terrain, harvesting metallic ore belched up from the planet's mantle. You could make a good living doing this sort of thing if it didn't first drive you insane, or so I'd heard. I'm a big fan of reality, though; any substitutes are just a bit too spooky for my taste.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

A woman walked past the hatch, glanced around, saw us standing there. She turned and was about to say something, but I pulled my hand away from the eye and gave her a sheepish smile as the hatch irised shut again.

"So much for keeping a low profile," Jeri whispered as we walked away.

"That?" I shook my head. "Don't worry about it. Probably happens all the time."

She nodded pensively, but didn't reply. We walked a few more meters, made a turn to the left, found ourselves at the beginning of the long passageway leading to the station's north end. It was almost vacant save for a couple of crewmen and a custodian 'bot. Just as the dockmaster told us, a wall sign pointed the way to Aphrodite's Shell. The gravity-gradient was a little stronger now, so we didn't have to walk quite so carefully. I picked up the pace a bit. I was getting thirsty, and I've never met a bar I didn't like.

"Did you notice the flat?" Jeri asked.

"Hmm? No, not really. Why, was there something I should have seen?"

"I don't know, but it looked like the surface was a little more active."

"More active compared to what?" I gave her a sidelong glance. "This is Venus we're talking about. If you don't like the geography, wait ten minutes."

"Never mind." She shook her head: another Primary gesture she'd picked up from me. "Are you sure you want to go through with this?"

"Yeah, sure." Then I realized what she was asking. "No, I'm not, but I don't think we've . . ."

"Got a choice." She sighed. "That's what we've been telling ourselves, but we do. We could drop off the cargo, refuel the *Comet,* take on supplies, tell the Brain to plot a course for the Belt that wouldn't take us past Earth. It would take us a little longer than usual to get there, but we could make Ceres in . . ."

"Twelve months, sixteen, sure. But we'd never be able to go home."

And in the meantime, Jarvis and Dann would have made good of their implied threat. The full story of what happened aboard the *Fool's Gold* would have been made public, and our reputations would be forever ruined. Within a year, no self-respecting outfit would ever hire us. We'd be in worse shape than even when McKinnon was captain; back then, the worst that could be said about the *TBSA Comet* was that it was commanded by a fool.

And, damn it, I had come to enjoy my new-found fame and fortune. I liked respectability, I liked not being in debt, and I liked not having to scramble just to make a living. If keeping all that meant having to do a dirty job for the Pax . . . well, so be it. I'd hold my nose, and hope that I could still look myself in the mirror after I'd betrayed one of the heroes of my youth and delivered her to her enemies.

"Sorry, sweetheart," I whispered, "but that's not an option. Like it or not, we're committed."

She didn't say anything. She was the captain, of course, and that took precedence over being my wife. If she wanted to call this off, she could rightfully do so, and I was obliged to follow her orders, both legally and morally. Yet she knew the score as well as I did. We were trapped. . . .

No, not trapped. Cursed. Cursed by Captain Future. I'd just glimpsed Hell; if Bo McKinnon was down there, the ugly bastard was probably laughing his ass off.

I hoped there wasn't an afterlife. It wasn't the prospect of meeting Bo McKinnon that bothered me, though. It was having to explain what I had done to Dad.

And that's how, a few minutes later, we found ourselves sitting in

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Aphrodite's Shell, waiting for an old woman we had been ordered to drug, kidnap, and haul back to the Pax. Bad music, worse company. I was beginning to wondering whether Jenny Pell had received our dinner invitation when a shadow fell over our table and someone asked if I was Captain Future.

Curt jumped toward the space-suit locker which in the Nova, *as in most ships, was in the airlock. He snatched out a space-suit and donned it hastily, as Quorn's followers battered madly at the door.*

Once he had the suit and helmet on, Curt opened the outer door of the airlock. The air in the lock at once puffed out into empty space.

—Hamilton, *The Magician of Mars* (1941)

Holding my breath didn't help.

When the outer hatch's double-doors slid apart, the airlock's atmosphere was voided in a split second and we were blown out into hard vacuum like so much trash. My lungs couldn't handle the sudden pressure drop; air exploded from the depths of my chest as my ears popped painfully and I tumbled head over heels into frigid darkness. . . .

Then the cold hit, hard as an icy mallet. My skin tingled as sweat instantly froze, the cuts along my ribs burning as if I had been branded.

Jeri was ripped from my arms. A brief glimpse of her face, her mouth open in a silent scream, then she spun away from me, her arms and legs flailing helplessly. I reached out, tried to grab her again, but she hurtled away into darkness.

A nimbus of bright, harsh light surrounded us, and I had a second to wonder if this was what death was like. Then an irregular shape loomed behind the nimbus, and we fell through the light into a hatch that yawned open only a few meters from the airlock.

My back hit the far wall of a narrow compartment. I blindly grabbed for something; my left hand found the back of a couch, and I desperately clung to it, hanging on for dear life. Jeri was above me, upside-down, hugging another couch with both arms.

Then the hatch shut, and there was a long, deafening roar as oxygen flooded the compartment. I gasped, trying to force my tortured lungs to work again; my head swam and I almost blacked out, but pain kept me awake. We had been exposed to hard vacuum for only about ten seconds, perhaps even less, but that was long enough. It seemed as if every cell of my body had been flogged.

At long last, the compartment's atmosphere equalized at 12 psi. The noise of emergency repressurization died off, although I could still hear a faint roaring in my ears. I looked up at my wife. Tiny red bubbles escaped from her nose, floated around her face; slight barotrauma, but no signs of decompression sickness. Her eyes were open, and she managed to give me a weak nod.

Now I saw where we were: the passenger compartment of the same ferry that had brought us over from the *Comet* only a little more than an hour ago. The young pilot was in the cockpit, wearing a softsuit; he loosened his seat harness and turned to peer at us through his helmet's half-open faceplate.

"Copa, you?" he asked. "Nobody zeroed?

My throat felt like it had been rubbed raw with sandpaper. "No, we're still here," I rasped. "Thanks for the save."

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"Drop the line, I didn't. Frozen daiquiri, almost you both. Total sucky. Armstronged that maneuver, that you did."

" So did you, dude. I owe you one."

He grinned, then reached under his seat and pulled out a squeeze-bottle. "Brain fart not mine," he said as he passed it back to me. "Get comtalk from your cap. Low flyby on east lock, dep and open hatch, standby for blowout. Nada reboot, just backslashed it."

I glanced at Jeri, and she nodded weakly. So she had used her subcutaneous comlink to establish contact with the ferry pilot, and told him to maneuver close to the east airlock, depressurize and open his hatch, and wait for us to be blown out. That explained why she had been talking under her breath outside the airlock; she had been subvocalizing her instructions. Fortunately, the kid didn't ask why, but simply followed her orders. No, he hadn't dropped the line.

I took a long draw from the squeeze bottle and passed it to Jeri. I hurt all over, and she didn't look much better. "You're going to get in trouble for this, you know," I said, rubbing my arms against the cold. "Your friends wanted us dead."

He shook his head. "Same time, ditto comtalk from GM."

"What?"

"Fresh apples. Uplink with her now." The pilot reached up to his com panel, toggled a switch. "Victor Alpha ComOps, X-Ray Charlie two-ten. Taken aboard two passengers, both alive and in good condition. Ready to receive open transmission."

He flipped another switch; a crackle of static, then a voice came over the comlink: *"Captain Lee-Bose, Mess'r Furland, I assume you can hear me."*

Damn. It was Jenny Pell.

"I also assume this experience has taught you a valuable lesson," she continued. *"I could have not bothered to arrange for a ferry to receive you outside the airlock. If I hadn't, you'd both be dead now. But I wanted to extend you the same degree of mercy that the Pax denied me many years ago. My former husband would have doubtless had me jettisoned had I not escaped first."*

I glanced at Jeri again. She had tried to save us, but Pell had beaten her to the punch. *"Your true intentions were obvious the moment you came aboard,"* she went on. *"No one coming in from the Pax ever asks to see me . . . and as I said, M'sser Furland, your reputation precedes you. I wasn't surprised, though. In fact, I've been expecting the Pax to send someone out here for a long time now. I don't know if you were ordered to kill me, or simply bring me back to Clarke County. Either way, you've been exposed. So . . ."*

A pause. *"So let's just drop it, here and now. I've demonstrated just how easily I could take your lives. I didn't, so take it as a warning. Now go home. Goodbye."*

And that was it. The pilot switched off the comlink, looked over his shoulder at us again. "To your ship, back we go now. Comtalk with chief, no more. We . . ."

"Scrub the google-speak, willya?" I pushed myself over to Jeri. She had withdrawn into herself, her long legs pulled up against her chest, her hands clasped together between her knees. She was shivering, though not so much from the lingering chill as from terror. I had never seen her so frightened. Nor could I blame her. If this little ferry hadn't been waiting just outside the airlock. . . .

No point in thinking about that now. I wrapped my arms around her shoul-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ders, held her close. "Easy, sweetheart," I murmured in her ear. "It's over. It's all over."

She nodded against my chest, clutched my shirt with her long fingers. Out of the corner of my eye, I saw the pilot staring at us. "Sorry," I said to him. "Didn't mean to sound ungrateful, but . . ."

"Can't leave yet." Jeri's voice was very soft, barely audible; her teeth chattered faintly. "Unload cargo. Refuel ship."

Elvis, the woman amazed me. She had just kissed death, and still managed to think like a captain. "The tugs are already taking off your cargo," the pilot said. "They started just a few minutes ago." At least he had dropped the phony Superior jive. "A fuel barge will rendezvous with your ship in about an hour. Fuel costs will be deducted from the wholesale value of your cargo."

The freight in the *Comet*'s cargo bay was worth a lot more than a few kilotons of hydrogen. No sense in protesting, though; with whom would I lodge a complaint? Hell, we were lucky to still be alive. "All right," I said. "Just get us back to our ship, and we'll call it even."

The pilot's only response was to place his right hand on the throttle bar and move it forward a centimeter. The ferry shuddered slightly as its thrusters fired, moving us away from the station. I grabbed a ceiling rung with my free hand, watched through a porthole as the distant speck of light that was the *Comet* hove into view. In ten minutes we'd be back aboard ship, and I could get Jeri to the infirmary.

But we weren't heading home just yet. I might have been lucky, but I was also angry, and I still had unfinished business aboard Evening Star.

"Cain, you're coming with us."

As he spoke, Captain Future started to draw the atom-pistol from his belt to enforce the command.

Desperation, and raw terror, flashed into Rab Cain's sullen eyes.

"You're not taking me, even if you are the Futuremen!" he yelled.

—Brett Sterling (Edmond Hamilton), *Red Sun of Danger* (1945)

I was wrong about Venus. Viewed from the *Comet*'s outer hull, the planet was actually rather pretty. As the twice-normal-size Sun rose above the planet's limb, the regions along the terminator line were briefly gifted with subtle golden hues, the morning light casting vague drifting patterns across its cloud tops. A place of subtle and mysterious beauty, Venus. I could have stayed out there for another hour or so, just taking it in, but I had other things on my mind.

The fuel barge hovered only a few meters beneath the *Comet*'s engine superstructure, its trunk-like hose clamped against the intake valve forward of the Number Six tank. As I made my way, hand over hand, along the underside of the cargo bay, I was careful to remain in the shadows where the barge pilot couldn't see me. He was visible through the cockpit windows; every now and then he would glance up from his board and I'd freeze as best I could, considering that I could have easily waved to him if I'd cared to free one of my hands. If he spotted me, though, he didn't report my presence; I was monitoring his comlink channel, and all I'd heard was routine crosstalk between him, the Brain and the traffic controller on Evening Star.

No one knew I was out here. Not even Jeri.

I didn't mind keeping secrets from captains, but not when I'm married to

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

them. Had she known what I was planning to do, though, she would have doubtless ordered me to stay aboard. Yet she had no clue as to what I was up to; she was still in the infirmary, recuperating from shock while the autodoc fed her glucose and mild sedatives. For all she knew, I was up in the command center, getting the *Comet* ready for our long journey home.

We'd leave soon enough, but not before . . . well, not before I settled my affairs with Jenny Pell and company. Call me a vengeful son of a bastard, but nobody jettisons me from an airlock and gets away with it.

The barge midsection was only a few meters below my dangling feet when I felt a tiny shudder pass through my suit gloves. I let go with my left hand, twisted around so I could look forward. The trunk had been released, tiny globules of liquid hydrogen dancing away in the sunlight. The pilot reported that refueling was complete. The Brain confirmed that the *Comet*'s tanks were topped; a few moments later, the Evening Star trafco gave the barge pilot permission to leave.

Time to jump ship.

It wasn't so much a matter of jumping, though, as it was simply pushing off with my right hand and falling backward. I hate untethered EVA; screw up in even the smallest way, and you're one more hard-luck story for the guys at Sloppy Joe's. When I was free of the *Comet,* I twisted around and reached down to grab the open truss surrounding the barge's fuel spheres. Sharp pain stitched across my ribs where the autodoc had closed my cuts; damn, some of the sutures must have ripped open. No time to worry about that now, though; I uncoiled a line from a cartridge on my utility belt and managed to hook its tether around a bar just before the pilot fired thrusters.

The barge began moving away from the *Comet.* Acceleration was gentle; I didn't have to hold on very hard, just keep my grip and wait for the barge to return to port. My only fear was that the pilot might have instructions to refuel other vessels—in which case, I was in for a long ride—but within fifteen minutes he had returned to Evening Star, making for a service-craft cradle on its south arm.

I left his company well before then. As the barge swung past the west airlock, I unlatched the tether and let the cartridge reel in the line while I clung to the truss with both hands, bracing the soles of my boots against its ribs. I waited until the barge's shadow passed across the hub's tubular hull, and when I figured my timing was just about right, I launched myself headfirst at the station.

Total distance was only about fifteen, twenty meters tops . . . but mind you, although the hub was a relatively stationary target, it rotated along with the rest of the station. If I screwed up and missed the hub, I might have sailed off into space. Given my proximity and angle of attack, though, it was much more likely that Evening Star's south arm would have come around to slap me like a flyswatter. The boys at Sloppy Joe's would have really had a hoot over that one.

I got lucky, though: not only did I not miss the hub, but I also made touchdown only ten meters from the airlock. I slid facedown across the hull for a few more meters—another sharp pain in my ribs—until I managed to grab a service ladder running across the hull from the hatch. I reattached the tether to one of its rungs, let out my breath and gave myself a few moments to rest, then began the long rappel to the airlock, belaying myself as I went.

There was a porthole overlooking the airlock's outer hatch; nobody was standing there, but anyone who happened to glance out while walking past

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

could easily see me, so I had to move fast. Just as I anticipated, though, the hatch had an outside control panel; I flipped open the cover and depressurized the airlock, then hit the OPEN switch. The double-doors opened, no problem; I detached the cartridge from my belt and let it go along with the line and tether, then slipped inside.

So now I was back on Evening Star. I can't say I wasn't sorely tempted to jimmy the airlock inner control panel so that I could open the inside hatch without first repressurizing. It would have served the assholes right to have a full-scale blowout. But that wasn't on the agenda, so I hit the proper buttons, knowing well that red lights would flash in ComOps and someone would probably wonder who the hell was cycling through the west airlock.

While I waited, I reached to my right thigh, unholstered the AFM Mk.II Liberator I had taken from its hiding place in the galley. Nasty little bastards, these Liberators: particle-beam handguns capable of blowing fist-size holes in anything less resistant than titanium alloy, they were manufactured on Mars for the Ares Free Militia. Totally illegal in the Pax, of course—the Queen doesn't like firearms better than those supplied to the Royal Militia—which is why I picked mine up on the Belt black market. Jeri didn't know about it; she hated energy weapons as a matter of principle. That's why I kept mine beneath the deck service panel below the coffee maker. Like I said, I hate keeping secrets from my wife. On the other hand, you never know when uninvited guests are going to drop by.

Indeed. I rechecked its charge—three shots, all I figured I'd need—then reached back with my left hand to the small, vacuum-sealed case I had secured to the side of my life-support pack before I'd left the *Comet*. A quick tug of its straps and it came away easily. Setting it down upright between my boots, I pressed a button on its topside. It went red. I picked up the case by its handle with my left hand and waited for the lamp above the airlock hatch to flash green.

When it did, I didn't depressurize my suit or raise the helmet visor. Instead, I thumbed the button on my right wrist that activated the suit's outer speaker and microphones. Then I stepped back from the hatch and waited just a little longer.

A couple of minutes passed, then the inner hatch opened like a rose and there, considerably less fragrant, was my old friend, the dockmaster. Still didn't know hisher name; not that it mattered much, but I did enjoy the moment when heshe gaped at me, hisher beloved datapad trembling in hisher hands, as I raised the Liberator and pointed it straight at hisher face.

"You know what this is?" I asked, and was gratified when heshe nodded vigorously. Good; the suit's external speaker was working properly. "Then you know what it can do."

Another nod. Yes, it was a gun, and yes, it could kill himher. "Okay. Now walk backward . . . slowly, one, two, three, that's it . . . and take me to Jenny Pell."

Hisher eyes widened as heshe hastily backstepped into the ready-room. "I . . . I don't know where . . . I mean, I don't know who . . ."

"You know who." I was out of the airlock now, marching himher backward through the compartment. "And you better know where." Another terrified nod. "Okay, take me there. Now."

I escorted himher out of the ready-room and into the narrow corridor just outside. As heshe went through the hatch, I saw himher glance to the left just before heshe stepped to the right. I didn't wait for himher to clear the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

hatchway; the hardsuit made it hard for me to move fast, so I had to knock him/her aside as I rushed forward and turned to my left.

Frank the Lizard was just outside, back against the bulkhead, flechette pistol raised in ready position. I came around the corner with my gun aimed straight at the tip of bone-ridge between his slitted eyes. He was less than a meter away, point-blank range.

"Please fire," I said. "I've had a lousy day."

He froze. Whoever had redesigned him as a reptile had neglected to give him reflexes that suited his appearance. That, or perhaps he had gone cheap when he turned himself over to the nanosurgeon. Either way, he was more skunk than skink, and his rounds would have only scratched my suit's carapace.

"As-s-s-shole," he hissed, then he dropped the pistol.

And to think that there's people who still believe that evolution is a fraud. . . . "Okay, Frank, over there." I used the gun to beckon him closer to the dockmaster. "Pull anything funny, and . . . look, just don't try it, okay?"

His elongated head made a quick, reptilian jerk: his version of a nod. "What do you do here?" I asked.

"S-s-s-security chief-f-f-f."

"Okay, security chief, take me to your boss."

Making them lead the way, I marched them down the passageway, pausing every now and then to quickly look back to see if anyone was trying to sneak up on me from behind. The corridor remained empty, though, which was just as well. I had no intention of killing anyone, but I wasn't about to let myself get ambushed either.

We crossed over to the main passageway. When the dockmaster turned left at a sign marked *ComOps,* Frank looked over his shoulder at me, as if making sure I was still following them. "Still here," I said, then another thought occurred to me, something that had been bugging me since we'd first met. "Say, Frank . . . nothing personal, but why the lizard retrofit?"

His lipless mouth pulled back from his fangs. I think it was supposed to be a grin, but it was really scary. "Acc-c-c-ident down on s-s-surface, two years-s-s ago. Pross-s-spector s-s-s-hip went down. Hull cracked, los-s-st press-s-s-sure. Burns-s-s across-s-s 90 perc-c-cent of my body."

"You've been on Venus? And made it back?" I was impressed; there weren't too many people alive who could claim the same thing. Under other circumstances, I would have taken him to Aphrodite's Shell and bought him a drink. "That's tough, man. Sorry to hear about it. So . . . why have yourself remade as a lizard?"

His slit-shaped eyes blinked. "Why not?"

It was impossible to read the expression in his inhuman face, but Frank had obviously lost more than his skin down there. The dockmaster had stopped a few meters ahead and had turned around, waiting for us to catch up. "Right," I said, then motioned for him to keep going. "Okay, let's go. Don't want to keep the nice lady waiting."

He didn't move. "S-s-stop now, go back to your ss-s-ship, we'll forget everything. "

"The same way as last time?" I shook my head within my helmet. "Sorry, pal. That trick works only once. Now walk."

The sign above the hatch at the end of the corridor read *Authorized Personnel Only.* The dockmaster couldn't open it; I had Frank step around him/her and press his right hand against the I.D. panel. The hatch opened to reveal

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

another long, cylindrical compartment, its curved bulkheads lined with dozens of flatscreens. About eight men and women sat at consoles beneath the screens; the ones nearest the hatch glanced up and did a double-take as we came in. One guy half-rose from his chair, then sat down again when I waved the Liberator in his general direction. The others didn't notice us until I prodded Frank and the dockmaster the rest of the way into the room.

"Ladies, gentlemen," I announced when I had their attention, "please remain seated. If no one moves, no one will be hurt. I'm only here to have a chat with your general manager." I couldn't immediately make her out in the shadowy confines of the compartment. "Jenny Pell, if you're here, I'd like to . . ."

"I'm here."

Her voice came from the far end of ComOps, beneath a screen displaying a fuzzy monochromatic image of a 'bot trundling across the Venusian surface. All heads turned in her direction, but I didn't see her until she stood up. She had braided back her white hair since the last time I laid eyes on her; the warm glow of the screens cast her face half in shadow.

"And whom may you be?" she asked.

Damned if she didn't look as regal, if not more so, than her former associate on Clarke County. I'd seen Queen Macedonia only once in the flesh, and then from a distance, during a Thirty May ceremony aboard the colony: a withered old crone surrounded by cabinet ministers and members of Parliament, standing on the balcony of River House to deliver a brief proclamation honoring the heroes of the revolution. Well, here stood one of those heroes, albeit in exile, and considerably healthier than Her Royal Majesty. Once again, I found myself wondering what my father would say if he knew what I was doing.

"Ma'am, I . . ." Something was caught in my throat. I took a moment to swallow it down. "Ma'am, I'm Rohr Furland, First Officer of the *TBSA Comet*. You had me and my captain jettisoned a couple of hours ago. I've come back to ask why."

A faint murmur along the duty officers as they looked back and forth at each other. Apparently they hadn't heard about that little incident. Pell ignored them. "My apologies for not recognizing you, M'sser Furland," she said. "It's not often that spacers in hardsuits come in waving guns. I'm glad to . . ."

"Ma'am, would you please come closer? It's hard to hear you."

She didn't move at first, then she reluctantly walked down the center aisle, carefully placing the soles of her stikshoes against the carpet. Damned if she didn't have guts. "I'm glad to hear that your captain's still alive," she continued. "I hope she's doing well."

"She'll get better." No sense in mentioning that Jeri didn't know I was here, or that I was leaking blood within my suit. "You should have accepted our dinner invitation. It would have made all this a whole lot easier."

Out of the corner of my eye, I spied a duty officer on my immediate left stealthily reaching for a heavy-looking operations manual on his console. "No, no," I said, dissuading him with the muzzle of my gun. "Bad idea. Leave it alone."

The tech withdrew his hand. "You're one to talk about bad ideas, M'sser Furland." Jenny Pell had stopped a couple of meters away. "I apologize for the rough treatment, but it was meant as a warning. You should have launched when you had the chance."

"Still do. In fact, I'm planning on leaving again in just a few minutes. Only this time, you're coming with me."

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

She shook her head sadly. "Sorry, but I must decline. That's not an option."

"I thought you'd say that." I lifted my left hand, showed her the small case I had carried over from the *Comet*. "You know what this is? Maybe you don't . . . it's a scuttle charge from my ship. Removed it from belowdecks before I hitched a ride over here. A half-kiloton nuke. All I have to do is push the little red light on top and . . . well, ConSpace will soon be building Evening Star 2."

Yes, I was bluffing. The case was a pressurized blood plasma carrier from the *Comet*'s infirmary, its markings painted over. The red light was the release button; if I pushed it, the loudest event it would cause might be a loud pop and the hiss of escaping air. It was large enough to hold a charge, though, and I had already demonstrated a certain capacity for bad craziness. I was hoping that it would make anyone think twice about rushing me.

As a gambit, it seemed to work. Everyone stayed right where they were, although the crewmen closest to me looked like they were ready to crawl under their consoles. Yet Jenny Pell remained unflustered. "Then you'll kill yourself and everyone aboard the station," she said calmly. "I don't think that's what you have in mind, Captain Future."

"Don't call me that."

A hint of a smile. "Pardon me. I forgot." Then she frowned. "But neither do I believe you truly wish to bring me back to Clarke County. Call it a hunch, but never once during this entire affair have I heard you invoke Queen and country. Most Monarchists I've known seem to think the Pax rules the system by divine right. You, on the other hand, have consistently behaved as if you've been forced into this situation."

Great Mother, but she was perceptive. No wonder she had managed to spearhead a revolution almost single-handedly; she could read even a total stranger like a book. "You could be right," I said carefully.

She gave me a knowing nod. "If that's the case, then we have a common foe. May I make a suggestion? Give me a minute . . . two minutes, if that's not too much to ask . . . and I'll tell you everything the Pax hasn't told you. If you're satisfied with what I've told you, then we'll find a way to settle our mutual problem."

"And if I'm not?"

She shrugged. "Then you can try to take me off this station. Or you can detonate your bomb, if you really wish to." Something in her voice made me wonder if she had realized that I was bluffing. "Either way, I'll repeat what I've just said. I won't willingly leave Evening Star. You'll have to kill me first."

"I don't want to kill you," I replied, "and I don't think they want you dead either. My instructions were to bring you back alive, so that you could stand trial for high treason."

"Treason?" Pell chuckled softly. "I think not, M'sser Furland. Oh, they might put on a show trial, but if that was all they really wanted, the Pax would have had me legally extradited a long time ago, while I was living in the United States or France." She shook her head again. "No, my former husband has something else in mind. That's the part the Pax has kept from you."

She turned to one of the crewmen sitting behind her. "Alphonso? Would you please call up a geophysical map of the surface?" The crewman tapped at the keypad on his console. An instant later the screen above his head changed; now it displayed a global false-color projection of the Venusian surface, all its continents, rifts, mountains and major craters exposed as if the planet's dense atmosphere had vanished. It looked much the same as the map Jeri and I had glimpsed in the telerobotics compartment elsewhere in the hub.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"First, you have to recall the fact that Venusian history has largely been shaped by volcanic events." Pell pointed at the reddish-yellow highland areas along the equatorial zone, along with Maxwell Montes near the northern pole. "The most severe event occurred about six hundred million years ago, when all the major volcanoes erupted near-simultaneously, causing lava to sweep across the entire face of the planet. It completely resurfaced the planet, wiping out all preexisting formations. We know this because all the meteor impact craters are relatively recent and approximately the same age. Any craters older than six hundred million years were obliterated by the . . ."

"That's interesting, but . . ."

"I still have a minute," she said, holding up a finger. "Please let me continue." She looked at Alphonso again. "Wipe and replace with a real-time projection. Include most current data for surface temperature and tectonic activity." As the technician reconfigured the screen, she turned back to me. "When those ancient eruptions occurred, various metals were brought up from the mantle and evenly scattered across the surface. That's the regolith that ConSpace has been mining, and quite profitably at that, yet like any other planetary resource, it's finite and exhaustible. It's always been difficult to for us locate the best lodes, given the amount of surface erosion, and the environment has made it all but impossible to sink mine shafts into the planet's crust."

"So you may not be able to mine Venus for very much longer."

"Oh, we can. There's enough down there for ConSpace to exploit the planet's resources for many years to come. Yet it's going to become progressively more difficult, because all the easily reached lodes have already been located. Before long, ConSpace won't be able to achieve maximum profitability, and Venusian mining will grind to a halt." Then she smiled. "Yet nature may soon provide us with a solution."

The screen had changed again. Now the regions surrounding the volcanoes were white-hot, the jagged vents within the rift valleys glowing like cracked glass in a kiln. "Ever since Evening Star began operation, we've observed a steady increase in seismic activity, particularly in the highlands. Everything indicates that Venus will soon experience much the same sort of catastrophe that occurred hundreds of millions of years ago. Exactly when, we cannot accurately predict. It could be next year, next month, tomorrow afternoon . . . we don't know. But it will happen, no question about it."

The Brain could have interpreted all this for me, but I wasn't comlinked with the *Comet*. "So? What are you trying to tell me?"

She sighed. "When this second event occurs," she said patiently, "Venus will be resurfaced once more. Vast pressure within the planet's core will cause volcanoes and vents to erupt, and billions of tons of lava will be vomited up through the mantle and crust. Surface heat will cause various chemical processes to occur, and once the lava solidifies—in a couple of years, my geologists estimate—then the planet will become . . ."

"Sweet Elvis." I suddenly realized what she was trying to tell me. "The biggest motherlode in the system."

"That's one way of putting it, yes." Jenny Pell smiled. "Another way to think of it is that a new planet will suddenly appear, one closer to the Pax than Mars or the Belt. Untapped resources beyond human imagination, worth . . ." She shrugged offhandedly. "A trillion megalox? Ten trillion? A hundred? How high can you count, Captain Future?"

For once, I ignored the nickname. For all my life—and before that, the lives

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

of my parents and grandparents—humankind had sought the riches of the solar system. When Earth's surface resources had become rarefied and nearly exhausted, it had ventured into space, prospecting first the Moon, then near-Earth asteroids, then Mars, finally the Belt and the Jovian moons and even the satellites of far Saturn. Yet these were old, cold worlds; like rats gnawing the bones of long-dead carcasses, everyone had subsisted on relics left over from the solar system's prehistory, all but ignoring the hot young planet in our own backyard.

A planet on the verge of rejuvenation.

"The Pax wants Venus," I said.

She nodded. "The Pax wants Venus, yes. It knows what's about to happen here, and it'll do whatever it can to take Evening Star from ConSpace." She leaned against the console and crossed her arms. "I don't know what it hopes to accomplish by having me abducted, but I think your Prime Minister plans to force ConSpace into surrendering this station. That won't happen, of course, but at the very least they probably intend to brainwash me. Perhaps get me to divulge crucial information. The location of the best lodes, proprietary info about ConSpace, that sort of thing." She grinned, shook her head. "Poor Neil. He must be getting desperate, resorting to this sort of low-grade skull-duggery."

Indeed he must, and so was the Pax. Jeri and I were being used as pawns in a far greater game than we had ever imagined. If the idea of kidnapping a hero of my youth had been repugnant before, it was now absolutely repulsive. I may be a fool, at times, but please don't treat me as such. It makes me mad.

"So there's the truth," Jenny Pell finished, "and now it's back to you. As I said before, you have only a couple of choices. You can press the red button and blow up the station, or you can shoot me." She shrugged. "Up to you, M'sser Furland."

I thought it over for a moment. More than a moment, actually. When I was done thinking, I carefully placed the case on the floor. Then I pushed the button.

Everyone in ComOps flinched as the case hissed loudly and its lid fell open. Even Frank the Lizard fell back. Everyone lost a minute of their lives except Jenny Pell, who smiled knowingly. Just as I had figured, she had known all along that I was pulling a hoax.

"So much for the first option," I murmured, keeping the gun on her. "Now for the second."

"Why didn't Captain Future come?" Tiko Thrin asked tersely. "I told you in my message that it was urgent."

The Brain, posed beside them, contemplated the excited little Martian with expressionless lens-eyes as he spoke in his rasping voice.

"Captain Future and the other two Futuremen went to Venus a week ago," he declared. "They've been helping Ezra Gurney smooth out some trouble with the marsh-men there. But before I had Joan bring me here, I teleaudioed them to come on here. They should arrive at any minute."

—Hamilton, *Planets in Peril* (1942)

We had trouble finding a berth at Highgate. The traffic controller didn't acknowledge the *Comet*'s primary approach until we were nearly at the outer marker, and when he finally he did he kept us on the periphery of the sta-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

tion's halo orbit for nearly four hours while another inbound freighter was docked ahead of us, offering neither explanation nor apology. It wasn't until Jeri threatened to file a formal complaint that the Highgate trafco allowed us to dock at the outer ring; we were slipped into a berth next to a Royal Navy frigate, which guaranteed that we'd receive second-priority status for post-flight maintenance.

It only got worse after that.

A ferry didn't swing by to pick us up for another three hours; its pilot knew Jeri and me and was usually friendly when we returned from a voyage, but this time he was sullen and aloof, barely saying a word as he transported us to Highgate's terminus. The next shuttle to Tycho was overbooked by the time we arrived, causing another three-hour delay, so we went to the TBSA lounge, only to receive more of the cold-shoulder treatment. Conversation dropped dead when we walked in, and it has hard to ignore the hostile glares from fellow spacers we'd known for years. I went to the bar and tried to order a drink, and the bartender told me he was on break and to use the 'bot instead before he went back to mixing an aldrin collins for a cargo grunt. Jeri and I found seats in a distant corner of the room, where we watched sitcoms and handball games on the screen for the next two and half hours. Nobody stopped by to say hello, and even the 'bot refused to run a tab.

It was a long, quiet flight to Tycho. We sat silently in the passenger compartment, watching the Moon come ever closer, saying little to one another. The steward was polite the first time he came by to offer us refreshments, but then he apparently recognized my face; after that, he hastily moved past our seats. After awhile Jeri took a nap against my shoulder, and I passed the time by replaying the events on Evening Star in my mind.

No matter how many times I re-examined the situation, though, it came out the same way. I had done the right thing, and it was exactly the wrong thing.

The door of our time-share didn't open when I pressed my thumb against the lock, nor did it respond to Jeri's hand. She called the rental office, and was informed that our contract had been voided. The other partners co-opting the suite had unanimously voted to have us evicted as undesirable nuisances; our belongings had been removed and placed in storage, and the balance of our rent had been deposited in our savings account.

When I called the Exchequer Lunar, I discovered that even that money had disappeared. The bank had removed the *TBSA Comet* from its AAA-list; our loan had been forfeited, our savings account placed in escrow. Our cash reserve was still available, but it was now capped at 500 kilolox . . . just enough for us to pay for the *Comet*'s postflight and refueling operations. Maybe more if we hocked some stuff. Our friendly vice-president, who had once eagerly posed for a holo with Jeri and me, was in a meeting just now, and could not be disturbed.

No apology. No explanation. Thank you, M'sser Furland, goodbye.

And that was when I realized, during all this time, no one had called me Captain Future.

I excused myself from Jeri. I left her standing just outside our former home, our bags piled against the door, and stalked down the corridor to a public toilet. It was vacant, which was just as well; I spent a centilox to get inside, two to use the head, and three more to wash my face and hand. And then I kissed off 100 kilolox wrecking the place. Demolishing a sink, a dryer, and a vending machine was an adolescent tantrum, to be sure, but it made

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

me feel a little better, and I managed to beat it before a cop arrived. No matter; the damage was eventually billed to my account.

We hauled our stuff down to a union hostel on the crater floor not far from the shuttle pits, where we checked in under the names of Curt Newton and Joan Randall; a cheap joke, but it was all we could afford. Our new address was a tiny, windowless cell smaller than the *Comet*'s wardroom; the floor and walls shuddered every time a ship lifted off, and the bunk's top rack sagged ominously when I climbed on it. We switched beds, and Jeri was attempting to get through to our union rep while I tried to take a nap when someone came knocking at the door.

I rose to answer it, and shouldn't have bothered. When the Pax comes calling, it doesn't need permission to enter; knocking first was only a polite gesture. The door slid open, and there were Agent Jarvis and Agent Dann.

On second thought, it was a good thing I had just demolished a public toilet. Assaulting a Pax official will get you five-to-ten in Mare Selenium, if the magistrate doesn't decide that you're not worth the oxygen or cell space and give you the long walk instead. But I was homeless and destitute and tired, so I just sat down on the bunk and let them come in.

"Sorry I can't offer you a drink," I said, "but I'm fresh out of everything."

They didn't sit down, mainly because Jeri had the only chair in the room. Her hand strayed to where she had placed her rapier against the wall, but Dann brushed back her jacket, revealing the taser holstered on her hip, and shook her head. "So I've heard," Jarvis replied as he closed the door behind them. "I'm sorry this happened. That wasn't our intention . . . or our doing, if you're wondering."

There was no reason for me to believe them, but I did. It wouldn't have served any purpose for the Pax to have us ostracized or impoverished. "I don't suppose we're going to receive knighthoods after all, are we?"

Jarvis almost looked embarrassed, if such a thing were possible. "I've been told that Her Majesty would prefer to distance herself from the events on Evening Star. Parliament, along with the news media, has been informed that the two of you were working alone, and your actions were neither requested nor sanctioned by . . ."

"Bastard."

". . . by any government agency. You were attempting to collect a bounty that didn't really exist. . . ."

"Which gets you off the hook from having to pay us."

"Please." Jarvis held up a hand. "Let me finish. We're still willing to pay you for your . . . ah, services, if it can be called that . . . pending the outcome of this investigation. However, it'll have to done discreetly, and . . ."

He coughed in his fist. "We first have to know that you'll never disclose the role our agency had in what happened out there."

"And suppose we do?" Jeri asked.

"Then we'd be forced to publicly reveal the full circumstances of Captain McKinnon's death." So much for sympathy and understanding. "How much worse your reputations would be damaged by this knowledge, I couldn't say. You seem to have done a pretty good job yourselves. But the TBSA hasn't rescinded your charter, and you're still licensed for commercial freight operations within Pax territory. We may even be able to help you straighten out your financial difficulties. If you decide to go public, though . . ."

"Still playing the trump card." Damn, what I wouldn't have given to get him alone for just a few moments.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Jarvis returned my glare. "We didn't ask you to do what you did. All we wanted you to do was get Pell back here and . . ."

"Well, y'know, what can I say?" The palms of my hands felt slick with sweat; I placed them on the mattress. "Sorry, but she didn't want to go? I gave her a chance, but when she told me that she thought you'd only throw her out an airlock . . ."

"So you took it upon yourselves to do that." Dann hadn't said anything until then. "You marched her into an airlock . . ."

"I didn't have any choice!"

". . . and hit the button, and blew her out into space."

"Hey, lady . . ."

"Fuck you." Her face was cold as hard vacuum. "I'd do the same to you if I could, just to let you know how it felt."

As if I didn't know. . . .

"I didn't have a choice," I protested. "Everyone knew why we were there the moment we came aboard. We had a drink in the bar, asked some questions, and when we realized that their security chief was wise to us, I sent Jeri back to the ship while I went to find Pell in the command center."

"The idea was for Rohr to dose her with the drugs you gave us," Jeri continued, "while I swung the ship around to the airlock for a pickup. Which I did, but he told me to go to the west airlock. . . ."

"East airlock!" I snapped. "Goddammit, I told you to rendezvous with the east airlock!"

She ignored me. "He said west airlock. Maybe he had one too many in the bar, but that's what he told me. So I got back to the *Comet* and brought it in close to the west airlock, but by then . . ."

"Okay, okay." Trying to get the story straight, Jarvis shook his head and raised both hands. "So the pickup was supposed to be at the east airlock and not the west. Did you give her the drugs?"

"You kidding? I didn't have a chance!" I let out my breath. "Look, it was everything I could do to get her out of ComOps and over to that airlock. I had to march her over at gunpoint, with their security people on my ass the whole way. I managed to suit up, but she wouldn't do the same, so I figured, hey, if I just voided the airlock . . ."

"She'd go over."

"Right. Exactly. Figured that, if the *Comet* was there, I could push her through the hatch and . . ."

"But the *Comet* wasn't outside."

I lowered my head. "It . . . it was at the wrong airlock. I didn't . . . I didn't know."

And nor did these guys, or anyone else who saw the event as captured by a camera in the airlock ceiling and recorded on disc, and later transmitted to the Pax. They had seen me, protected by a hardsuit, forcing a frightened woman into an airlock. They watched while I shut the inner hatch behind me and then, while holding Jenny Pell—hysterical, begging for mercy—at gunpoint, I hit the button that blew out the outer hatch.

And they had seen her being sucked out into space, to just the sort of sudden and horrible death that gives screaming nightmares to the most hardened spacers.

No matter how closely anyone studied the footage, they couldn't know that Frank the Lizard was waiting just outside the airlock, carrying an emergency airmask. Nor would they know that there was a ferry holding station only

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

three meters away, running lights darkened, hatch open and ready. Jenny had been exposed to hard vacuum for less than five seconds. I had to give her credit, having the guts to fake her own death that way, but she endured her carefully staged blowout with far less barotrauma than Jeri and I experienced.

"It was an accident, I swear." I heaved a deep sigh, rubbed the corners of my eyes. "If I'd known there wasn't . . . I mean, if I didn't think the *Comet* wasn't . . ."

"You shouldn't be so upset, M'sser Furland," Dann said. "After all, it isn't the first time you've committed murder."

I nearly laughed out loud. Instead, I squeezed my eyes shut, and hoped that they wouldn't notice that I was biting my tongue.

"But it accomplished the same purpose, didn't it?" Jeri picked up the slack for me, her voice utterly calm. "After all, you wanted Pell for treason. If the court had found her guilty, she would have received a death sentence anyway, would she have not?"

"If she had been found guilty, perhaps," Jarvis said, "but there might have been mitigating circumstances. The magistrate could have found reason to grant a stay of execution, if she had agreed to . . ." Dann shot him a warning look, and he stopped himself. "Well, that's a moot point now, isn't it?"

Yes it was. And it was also a tacit admission that extraditing Jenny Pell on treason charges hadn't been the true purpose of our mission. Jenny was right; the Pax only wanted her as leverage against ConSpace. I wasn't about to bring that up, though. After all, I was the idiot who had screwed up by killing her.

"At any rate, what's done is done." Jarvis folded his arms above his chest. "Although ConSpace has accused our agency of attempting an abduction, the Pax denies any involvement with your actions. This will remain the official version. Have I made myself clear?"

"Perfectly, yes." Jeri stared back at him. "And I hope it's also clear to you that we never wish to see you, or any other member of the agency, ever again."

"Don't worry, Captain Lee-Bose," Dann said. "I sincerely doubt we'll ever call upon you or M'essr Furland again." She took a step toward the door. "In fact, it's a foregone conclusion that this entire operation was a serious mistake."

She wouldn't get an argument from me there, although she'd never know the reason why. Forty-one million kilometers away, Jenny Pell was alive and well on Evening Star. Deceased so far as the Pax Astra was concerned, finally unencumbered from notoriety, free to pursue her own private agenda . . . namely, the downfall of the Monarchist government of the Pax Astra. She might be a revolutionary-in-exile, but I had no doubt that she would eventually return to the country that she had midwifed.

Hell, maybe I'd get a chance to go back and give her a hand. I had payback coming.

"Is there something you find amusing?" Jarvis asked.

He had opened the door to leave, but something in my face gave him pause. I hadn't realized I was smiling. "Me? No, no . . . nothing at all. Just a passing thought."

He gazed at me for another moment. "Not much of a hero, are you?" he murmured. "See you around, Captain Future."

And that's the last time anyone called me by that goddamn name.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

He's another guy, although I can't say I don't miss him, because I would be lying if I said I didn't enjoy some of the perks of fame. It was fun while it lasted, but Jarvis was right. I'm not much of a hero, when it comes down to brass tacks, and fame is a quality which is wasted upon me. All I ever did with it was cadge drinks, and you can't do that very well when you're a dude who pushes old ladies out airlocks. But Jeri has always been the boss, after all, and she was the one who managed to get us contracts once the heat finally blew over. We moved back out to the Belt, and we got along, and we survived.

Eight months later, the volcanoes of Venus went berserk and discharged waves of fresh lava all over its surface. It took a couple of years for the lava fields to finally cool down, but when they did, countless new lodes of rare metals were revealed, to none of which the Pax Astra had any claim. Although the space-mining market went into turmoil when lunar and near-Earth asteroid resources became devalued, the Monarchists weren't toppled overnight. Perhaps it was too much to hope that Her Majesty would be cast off her throne by something as trivial as a planetary catastrophe, yet the royalists did lose considerable clout in the Pax, and it wasn't long before Neil Schorr was forced to step down from being Prime Minister. Someone should have told him that no one gets to stay a hero forever.

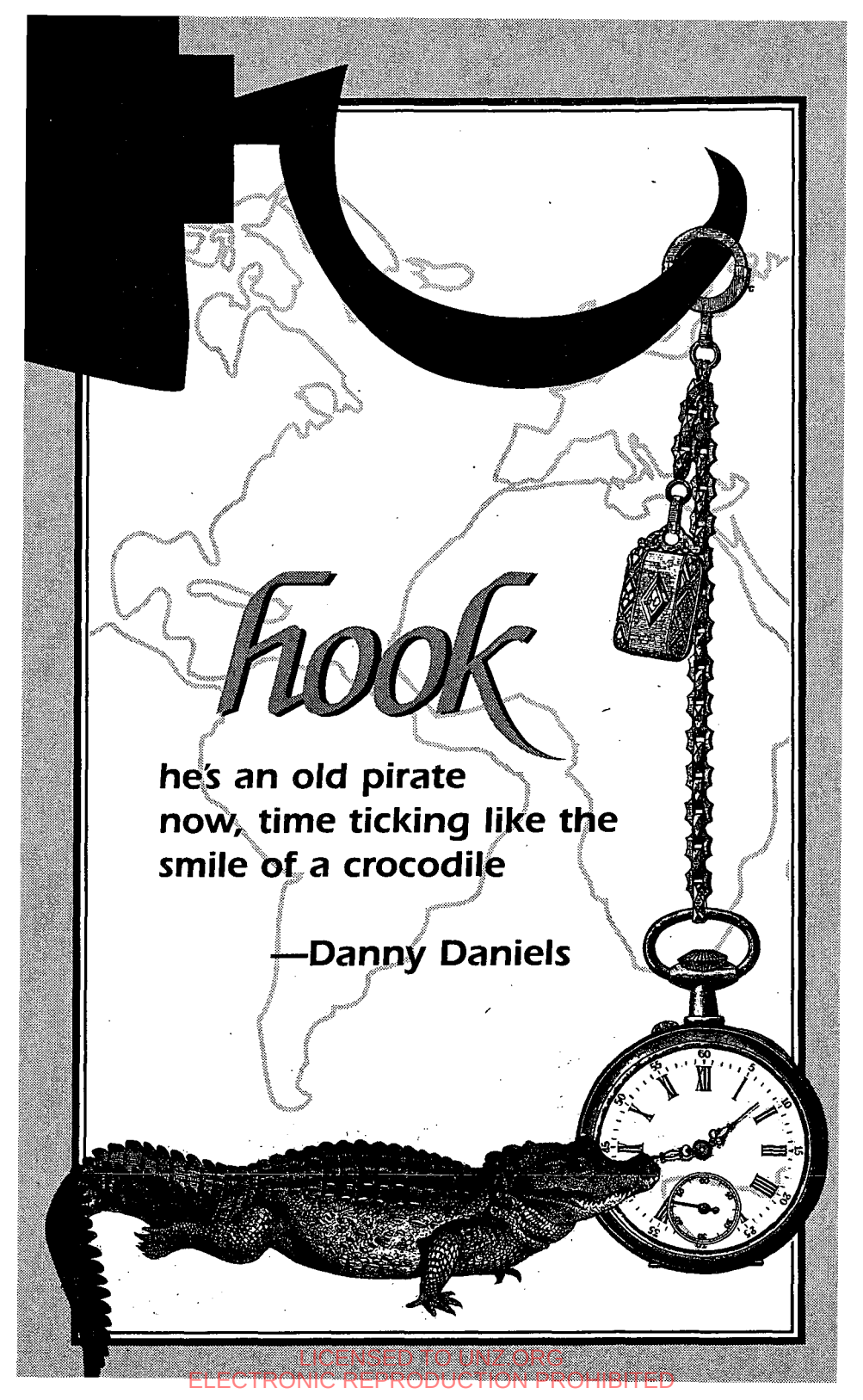
TBSA freighters vied with one another to receive one of those precious new Venus contracts with ConSpace, but the first ship to win a major bid was the *Comet*. That was when we finally made the trip back to Evening Star, and the first person to meet us at the east airlock was Jenny Pell. We had her over to our ship for dinner. By then I had finally learned how to cook an omelet.

This time, Captain Future is really dead, and if I have anything to say about it, he's staying that way. *Vaya con díos, amigo.* You were a better man than I, even though you never really existed. O

AUTHOR'S NOTE:

The quoted excerpts from the original Captain Future stories are reprinted with permission of Edmond Hamilton's literary executor, Eleanor Wood, and the Spectrum Literary Agency.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ON BOOKS

Peter Heck

In the early 1950s, the French novelist and critic Michel Butor took a close look at American science fiction. Butor's article (translated and reprinted in the influential *Partisan Review* several years later) has mostly been ignored by American writers about SF, no doubt because many of its comments seem ill-informed or supercilious. For example, while he names very few specific titles or authors, it is easy to guess that he had overlooked Bradbury and Bester, two writers that anybody reading American SF of the time ought to have noticed. And as often seems true of European critics viewing American culture, he gave the impression of slumming among the fascinating barbarians of the New World.

On the other hand, an outsider's perspective can provide unique insights, and Butor made a number of valid points. His observation that too many aliens in the SF of that time are considerably less exotic than a typical Mexican hits very close to home. Even many of today's writers, setting out to create an alien character, give us someone who could have been taken straight off the streets of Seattle. We are an introspective culture, more concerned with our own divisions than with the world outside—indeed, we are doing our level best to turn that outside world into a clone of ourselves.

Near the end of his article Butor made perhaps his most prescient observation. Noting the energy SF puts into worldbuilding, he questioned the duplication of effort in producing future societies none of which is ultimately very memorable. Instead of each writer inventing his own future world, he suggested that a number of writers get together and write about the same future world. Not only might this collaborative effort have greater imaginative richness than any product of a single mind; several of the most inquisitive minds working as a team might produce a future so seductive that humanity as a whole would decide to make it a reality, changing the face of the earth.

When I read Butor's article, I found that suggestion bizarre—and yet, in a very real sense, something very similar to what he posited has begun to happen in the expansion of the Star Trek universe. It seems clear that, by now, Star Trek has come to represent the genre of science fiction in the mind of the average person. And while there are many in the SF community who find this cause for alarm, there is equally reason to believe that it is, in some ways, the potential force for good that the French critic predicted. In part, that is the argument of:

FUTURE PERFECT: HOW STAR TREK CONQUERED PLANET EARTH
by Jeff Greenwald
Viking. $23.95 (hc)
ISBN: 0-670-87399-3

This book is nominally a history of Star Trek, but it expands its mission to examining the deepest roots of the cultural phenomenon that Trek has become over the years. Greenwald, whose credits include *Wired* and *Details*, describes Star Trek as "the nearest we have to a new global mythology," with an appeal that cuts across racial, ethnic, and religious lines, with stories from a time when

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

all humanity are united as citizens of Earth.

Greenwald sees another dimension of Trek's appeal as its promise of a future technology that does not dehumanize us. In the Trek universe, traditional heroic qualities of honor, courage and idealism are as important as ever. To explore these themes, he spent considerable time on the soundstage of *First Contact,* and conducted numerous interviews (including interviews with Kurt Vonnegut and the Dalai Lama as well as actors and fans). He also investigated Star Trek's incarnation in several foreign countries where one might expect that the show's particularly American flavor would lose something in translation.

The text is broken up with boxes containing everything from Trek-oriented filk songs (i.e., Trek-based words set to the melodies of well-known songs), news clips (e.g., the juror kicked off the Whitewater grand jury for appearing in Trek uniform), the name of the show in various foreign languages, jokes, scientists' comments on the show's accuracy, or a black woman astronaut's story of how she was inspired by Lt. Uhura. In short, there's plenty of support for Greenwald's thesis that the show has indeed taken over the planet.

The appeal of the show extends from NASA scientists to the German fans married in a Klingon ceremony that Greenwald describes in the book. Anyone who thinks this book's subtitle is hyperbole isn't paying attention to the world at large. I'm not sure I buy Greenwald's characterization of Trek creator Gene Roddenberry as a genius—the show itself has never gripped me as strongly as it has so many others, and its use of the potential of SF has always seemed shallow to me—but it's hard to come away from this book without gaining a healthy respect for Roddenberry's ability to capture the hearts and minds of so many watchers. There have been a lot of books speculating on various levels about what Trek means; this book goes beyond that question to ask what the popularity of the show says about us all. Michel Butor would undoubtedly be fascinated.

Another clear evidence of the extent to which Trek is at the center of our collective consciousness is the recent spate of books (beginning with Lawrence Krauss's *The Physics of Star Trek*) that draw on the show to teach science. Two of the most recent take slightly different approaches to the biological implications of Roddenberry's universe.

TO SEEK OUT NEW LIFE: THE BIOLOGY OF STAR TREK

by Athena Andreadis
Crown. $20.00 (hc)
ISBN: 0-609-60329-9

LIFE SIGNS: THE BIOLOGY OF STAR TREK

by Robert and Susan Jenkins
Foreword by Lawrence M. Krauss
HarperCollins, $22.00 (hc)
ISBN: 0-06-019154-6

With its huge cast of alien lifeforms (some with powers and senses no human can match), the Star Trek universe would superficially appear to stretch the most basic criteria of life as we know it. But, as the authors of both these books point out, no matter how exotic the cast, certain Earth-based assumptions are at the bottom of the show's biology. To begin with, most of these creatures are basically human in form—a fact explained in the universe of "Star Trek" by a variant of the panspermia hypothesis, which postulates that life on Earth and most other worlds was seeded (accidentally or deliberately) from some distant world where it began. (Of course, there is also the need to use human actors on the show.)

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

There are more basic assumptions, as Andreadis (a Harvard-based biologist) points out. Silicon has long been a favorite substitute for carbon in SF biologies, but organisms based on it will nonetheless be subject to gravity and electromagnetism, and will still need some way to permit continuity of form and function as the beings reproduce—in other words, some equivalent of a genetic code. Sensory organs will still be necessary to receive information from the environment.

Andreadis also pays some attention to the high proportion of machine intelligences in the Trek universe, ranging from androids like Lt. Commander Data to sentient computer viruses. These examples (and others drawn from film sources such as *Bladerunner* and print science fiction) take the author into subjects ranging from the nature of immortality or telepathy to the problems of universal translating machines—all of which throw considerable light on the dark corners of biology. She also notes that, in addition to the predominance of humanoid forms, the various cultures encountered by the *Enterprise* and its crew show far less social variation than a five-year voyage on Earth would be likely to uncover—although she recognizes that by Hollywood standards, this is fairly adventurous stuff.

For their part, the Jenkinses (both MDs; he is affiliated with the Mayo Clinic) take the anthropomorphic bias of Trek as a starting point for examining how similar organisms can diverge evolutionarily, focusing on a human embryo's development of facial features. Research on chimpanzees and other apes sheds light on the limited range of facial expressions in Vulcans, or the total lack of expression of the android Data. Facial morphology also affects our judgment of an alien race—in the Trek universe, the closer to the human norm its members' faces, the more likely a race is to be "good guys." (Andreadis also notes this point, which she calls the "Snuggleability Quotient.")

The Jenkinses suggest ways to expand the range of alien types portrayed on the show. A look at the sensory equipment of various organisms on our world provides possibilities that the show's writers have overlooked: sense organs that detect infrared light (common among snakes) or magnetic fields (used by birds for navigation). They go on to examine the factors influencing life aboard a spaceship (including the manufacture of food by a replicator), exotic life forms discovered by the *Enterprise* (rock-like intelligences), cloning, life extension, and other biological issues raised by the far-future setting of the show.

Both books make their points by reference to specific episodes and characters, showing a detailed familiarity with the show. All this is done clearly and good-naturedly, and (most importantly) without dumbing down the science. And both Andreadis and the Jenkinses are clearly Star Trek fans, despite their awareness of some of the show's concessions to the legendary inability of Hollywood to deal with ideas. While the books inevitably overlap, they also cover sufficiently different aspects of their material to allow a reader to enjoy and profit from both of them.

TREKS NOT TAKEN

by Steven R. Boyett
HarperPerennial. $10.00 (tp)
ISBN: 0-06-095276-8

Readers who feel somewhat less than reverent about Trek might want to look at this new book, Boyett's first in some time. *Treks Not Taken* is a collection of *Star Trek: The Next Generation* parodies, writ-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ten in imitation of well-known authors.

Boyett's brief introduction takes a mock-serious look at the meaning of Trek, then lays out the premise. The shtick is that the universal appeal of Trek inspired all these great authors to submit episodes (some long after their deaths). So here they are, "rescued" from Roddenberry's files. The selections range from classic authors like Melville ("Moby Trek") and James Joyce ("A Portrait of the Artist as a Young Fan") to more recent masters (Heller's "Trek-22" and Salinger's "The Crusher in the Rye") down to today's bestsellers ("Jurassic Trek"). And no doubt many of Dr. Seuss's fans will be pleased to see "Oh, the Treks You'll Take" here.

Boyett manages to walk a fine line between broad and subtle. The Melville parody ("Moby Trek") opens, "Call me irresponsible;" the Anthony Burgess ("A Clockwork Data") is salted with pseudo-Russian, and the Ayn Rand ("Fandom Shrugged") renames the starship *The Free Enterprise*. Boyett doesn't always resist the temptation to settle for obvious laughs, but the best of these parodies work on multiple levels. "The Ship Also Rises" echoes the style and substance of Hemingway works ranging from "The Snows of Kilimanjaro" to *Death in the Afternoon*. At the same time, it takes potshots at elements of the show, such as Patrick Stewart's supposedly frustrated ambition to play King Lear. It's a kick to watch Boyett fitting all these elements into a credible Trek plotline.

Boyett occasionally shows a mean streak, but it's as likely to be aimed at Jackie Collins or Bret Easton Ellis as at Trek. The worst Boyett has to say about Trek is no nastier than I've heard in conversations among regular watchers of the show.

While the results are inevitably uneven, there is plenty here to amuse both the Trek watcher and the literary reader—two categories that presumably have some degree of overlap. (Certainly, the publishers hope there's a substantial audience that will get the in-jokes on both sides.) Worth a try, especially if you're worried that Trek really might have taken over the world.

Finally, just a couple of recent books I've enjoyed—

ISLAND IN THE SEA OF TIME

by S. M. Stirling
Roc, $6.99 (mm)
ISBN: 0-451-45675-0

The basic conceit of Stirling's latest goes back to Mark Twain's *Connecticut Yankee* (if not all the way to *Robinson Crusoe*): take a modern person and transplant him to a distant past, where the modern's scientific and technical knowhow give him an enormous advantage over the primitives. Stirling's twist on this juicy premise is to take not a single person, or even a small group, back in time, but the entire island of Nantucket (with a nearby Coast Guard vessel thrown in).

The decision to use a large group solves one of the main problems of this subgenre, the improbability that a lone person will have the entire range of skills needed to survive in a primitive world, let alone to prevail over hostile natives. But a town of moderate size (Stirling uses the year-round population of the island, something like seven thousand) is likely to have several people with any necessary skill or knowledge, and the addition of the Coast Guard insures the presence of a body of trained military personnel, with at least a small stock of modern equipment.

An additional advantage of this approach is that Stirling can take full advantage of the range of possible reactions to the culture clash between twentieth-century sensibility and the primitive cultures—in this

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

case, those of the Bronze Age. And so we find every attitude from complete rapacity to a sentimental belief in the superiority of the unspoiled savages being acted out. Stirling has very little use for those who let ideology get in the way of clear vision, and some of them meet very unpleasant ends.

As with other such books, the plot follows fairly directly from the premise. The castaways discover their situation, take steps to ensure their survival, and gradually find themselves forced to take an expanding role in the world they have come to inhabit. Seeking necessary supplies (primarily foodstuffs) not in sufficient supply on the island, expeditions visit the North American mainland, Central America, and eventually Great Britain (not yet England) where they come into contact with various cultures as alien as anything in space opera. These range from paleo-Indians barely above the hunter-gatherer stage to the builders of Stonehenge. A few Mycenaean Greek traders are the only representatives of a moderately advanced civilization here (although there are hints that we may get a look at Egypt in the next volume). The Greeks, of course, instantly recognize the value of the Nantucketers' high-tech, and begin scheming how to get some for themselves.

Key characters include the commander of the Coast Guard vessel (a black lesbian); the mayor and police chief of Nantucket, a Coast Guard officer who goes renegade, and a young British woman from the culture that built Stonehenge. Stirling gets good mileage from such issues as the debate among the churches about their role at a time in which Christ has not yet been born, let alone been crucified. He also has plenty of fascinating detail on the revival of the whaling industry and other old-fashioned crafts and skills that are the Islanders' best bet for survival in a world suddenly bereft of the twentieth-century industrial infrastructure—but full of wildlife and unexploited resources. The effects on the natives are significant, as well—disease depopulates the Massachusetts Indian tribes, and the native peoples of Britain begin to learn disciplined military tactics in place of the every-man-for-himself mob assault that characterized them before the Islanders' arrival.

This is a big, thick book, and obviously only the first volume of the Nantucketers' story. Stirling has done interesting work before (including a series of collaborations with David Drake). But this is a major step ahead, and reportedly the book has met with enthusiastic response in the marketplace. Tough and unblinking, clearly based on wide-ranging research, this should add significantly to his base of readers.

IN THE RIFT

by Marion Zimmer Bradley & Holly Lisle

Baen, $21.00 (hc)
ISBN: 0-671-87870-0

This book (a sequel to *Glenraven,* by the same authors) is in some ways the reverse of Stirling's, bringing denizens of a magical fantasy world into contemporary America. The tone is lighter, for the most part, with the clashes of cultures being played largely for laughs, a mode in which Lisle has shown herself at home in earlier books.

Kate, a young woman in a small North Carolina town, comes into possession of a book that is a magical link to an alternate world, Glenraven. Four denizens of that world—of different races, only one really human in appearance—are transported into her front yard. She saves them from a monster that has followed them, then learns that they cannot

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

return to their world, and that both worlds face a danger that they must unite to defeat. The Glenraven exiles help Kate fend off local thugs who attack because of her Wiccan practices. At the same time, she and Rhiana, the most human-looking of the visitors, begin to learn how to make use of Kate's latent magical talents.

Meanwhile in Florida, Callion, an exiled wizard from Glenraven, plots his takeover of Earth. Kate and the exiles learn his whereabouts and travel to confront him. Comparisons of our world and the multi-racial, quasi-medieval society of Glenraven provide a fair amount of humor, as well as bargain-basement sociological comment. Callion turns out to have a dangerous monster in his captivity—one prone to break loose and eat the locals. We also learn that one of the exiles is a traitor, seeking to make common cause with Callion to return to Glenraven and seize power. With each of the aliens having a separate agenda, and Kate progressively further alienated from her own society, the tension builds until the confrontation with the wizard.

The culture clash between the fantasy premise and mundane American life generates a good bit of fun, including Rhiana eating in an IHOP, a bearlike Glenravener developing a taste for American beer, and a newscast picking up the mundane details of a shopping mall attacked by monsters. Kate is a science fiction fan who hits on the strategy of disguising her alien visitors as costumed fans ("Smile and wave," she tells them when they go into restaurants along the interstate). Callion, for his part, seeks out intelligent SF fans—he uses the men to feed to his monster, because they are the only segment of society that might recognize his goals and try to stop him. The women are recruited for a breeding program meant to raise a generation of wizards. Lisle's fans will spot a few in-joke references to her own solo writings.

There's not much point to speculation about which author contributed which elements to the book. As a rule with such pairings, the "junior" partner (in this case Lisle) does the majority of the actual writing, while the senior's contribution could be anything from a perfunctory outline to a full-scale rewrite of the other's draft. I don't know what the exact balance is here, but it doesn't matter enormously. The book is one that Bradley's readers are likely to enjoy, and I would expect Lisle's own fans to enjoy the book as much as they do her solo work. O

ARE YOU MOVING ?

If you want your subscription to ASIMOV'S to keep up with you, send both your old address and your new one (and the zip codes for both, please!) to our subscription department:

ASIMOV'S SCIENCE FICTION

P.O. Box 54625, Boulder, CO 80322-4625

or fill out the change-of-address form on our website: **www.asimov's.com**

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Index

This index covers volume 22 of *Asimov's Science Fiction* magazine, January 1998 through December 1998. Entries are arranged alphabetically by author. When there is more than one entry for an author, listings are arranged chronologically in order of appearance in the magazine. All entries are followed by a parenthetical note: (a) article; (c) cartoon; (ed) editorial; (ge) guest editorial; (na) novella; (nt) novelette; (p) poem; (r) review; and (ss) short story. Collaborations are listed under all authors and are cross-referenced. When a title, a parenthetical note, or an author's name is omitted, it is the same as that of the previous entry.

Addison, Linda D.
"Land Sharks" (p) ..... Sep 95

Backer, Sara
"Dad Street" (p) ..... Oct/Nov 67
Baker, Kage
"Lemuria Will Rise" (nt) ..... May 20
"The Literary Agent" (nt) ..... Jul 64
"The Wreck of the Gladstone" (nt) . Oct/Nov 134
Barton, William
"Down in the Dark" (nt) ..... Dec 8
Baxter, Stephen
"Dante Dreams" (ss) ..... Aug 56
Bell, M. Shayne
"The Moon Girl" (nt) ..... Jun 46
Bisson, Terry
"Get Me to the Church on Time" (na) ..... May 108
Boston, Bruce
"Human/Technological Dimensions on the Eve of the Bimillennium" (p) ..... Feb 43
"Gravity Drives the Blood and Bends the Light" (p) ..... Mar 65
"Curse of the Super-Hero's Wife" (p) ..... Apr 36
"The Veracity of Imagination" (p) . Aug 55

Cadigan, Pat
"Datableed" (ss) ..... Mar 90
Clemens, Sarah
"Red" (nt) ..... Jun 74
Coad, Brian C.
"Taking Care of Daddy" (nt) ..... Jan 84

Daniel, Tony
"Radio Praha" (ss) ..... Mar 48
"Grist" (na) ..... Dec 90
Daniels, Danny
"Nano" (p) ..... Mar 89
Davidson, Avram (& Michael Swanwick)
"Vergil Magus: King Without Country" (nt) ..... Jul 78
Dedman, Stephen
"Transit" (nt) ..... Mar 66
"Target of Opportunity" (ss) ..... Jun 64
Di Filippo, Paul
On Books (r) ..... Feb 146
—— (r) ..... May 147
—— (r) ..... Aug 132
—— (r) ..... Oct/Nov 227
—— (r) ..... Dec 133
Doctorow, Cory
"Fall from Grace" (nt) ..... Oct/Nov 68
Dozois, Gardner
"Editorial" (ed) ..... Jun 4
"Twelfth Annual Readers' Award Results" (a) ..... Sep 8
(& Michael Swanwick)
"Ancestral Voices" (na) ..... Aug 92
Duchamp, L. Timmel
"A Question of Grammar" (na) .... Apr 106
Duncan, Andy
"The Genetic Engineer Throws a Cocktail Party and Drinks Too Much" (p) ..... Jan 101
Dyer, S.N.
"Wild Child" (ss) ..... Mar 116

Egan, Greg
"The Planck Dive" (nt) ..... Feb 118
"Oceanic" (na) ..... Aug 14
Elliot, Kandis
"Evolution in Guadalajara" (nt) .... Jan 64
"One Miniscule Grain of Fact Grows the Giant Crystalline Entity of Conjecture" (p) ..... Apr 149
Esaias, Timons
"Checklist" (p) ..... Jun 44

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Etchemendy, Nancy
"Caliban in Ferragamos" (p) ..... Jan 63

Feeley, Gregory
"Animae Celestes" (nt) ..... Apr 66
Fintushel, Eliot
"Izzy and the Hypocrite Lecteur" (ss) ..... Feb 93
"Auschwitz and the Rectification of History" (nt) ..... Apr 38
Friesner, Esther M.
"In the Realm of Dragons" (nt) ... Feb 44
"Totally Camelot" (ss) ..... Aug 50
Frost, Gregory
"How Meersh the Bedeviler Lost His Toes" (nt) ..... Sep 62

Garcia y Robertson, R.
"Starfall" (nt) ..... Jul 106
Goldstein, Lisa
"The Game This Year" (ss) ..... Dec 54

Haldeman, Joe
"Odd Coupling" (ss) ..... Oct/Nov 90
Haywood, Laura W.
"The Past" (p) ..... Jul 33
Heck, Peter
On Books (r) ..... Jan 146
—— (r) ..... Apr 150
—— (r) ..... Jul 137

Jablokov, Alexander
"Market Report" (nt) ..... Sep 10
Jeffers, Daniel H.
"The Value of Objects" (ss) ..... Apr 100

Kagan, Janet
"The Stubbornest Broad on Earth" (ss) ..... Feb 110
Kandel, Michael
"Wading River Dogs and More" (nt) ..... May 84
Kelly, James Patrick
"Lovestory" (nt) ..... Jun 26
You Can Get Everywhere from Here: Start (a) ..... Jun 10
"Bierhorst, R. G., Seera, B. L., and Jannifer, R. P. 'Proof of the Existence of God and an Afterlife.' Journal of Experimental Psychology, Volume 95, Spring, 2007, Pages 32-36" (ss) .. Aug 84
On the Net: Experiment (a) ..... Aug 8
—— What's New? (a) ..... Oct/Nov 8
"Fruitcake Theory" (ss) ..... Dec 42
Kress, Nancy
"Steamship Soldier on the Information Front" (nt) ..... Apr 10

Landis, Geoffrey A.
"Approaching Perimelasma" (nt) .. Jan 10
"Willy in the Nano-Lab" (p) ..... Jun 25
Langford, David
"The Spear of the Sun" (ss) ..... Feb 36
Lunde, David
"Particle Resonance" (p) ..... Feb 35

MacLeod, Ian R.
"Nevermore" (nt) ..... Jul 14
"The Summer Isles" (na) ..... Oct/Nov 172
Marcus, Daniel
"Binding Energy" (ss) ..... Oct/Nov 164
Marusek, David
"Getting to Know You" (nt) ..... Mar 120
Mayhew, Joe
"Can You Spot" (c) ..... Jun 63
McAuley, Paul J.
"17" (ss) ..... Jun 14
"Sea Change, with Monsters" (na) . Sep 96
McDonald, Ian
"The Days of Solomon Gursky" (na) ..... Jun 88
McPherson, Danith
"Through the Wall to Eggshell Lake" (ss) ..... Oct/Nov 44
Mintz, Catherine
"Visitor" (p) ..... Jan 83
"Sphinx" (p) ..... Sep 83

Nansel, Robert L.
"Xiaoying's Journey" (nt) ..... Sep 46
Neube, R.
"King Moron" (nt) ..... Jan 46
"Quantum Commode Theory" (ss) Oct/Nov 56

Parker, Charles
"Uh, Thanks" (c) ..... Jul 141
"Loved Him" (c) ..... Oct/Nov 55
"Honey, It's" (c) ..... Oct/Nov 236
Person, Lawrence
"Crucifixion Variations" (nt) ..... May 66

Rathbone, Wendy
"November" (p) ..... Oct/Nov 149
Reed, Robert
"Mother Death" (na) ..... Jan 102
"Savior" (ss) ..... Aug 70
"Whiptail" (ss) ..... Oct/Nov 150
"Building the Building of the World" (ss) ..... Dec 72
Rosenblum, Mary
"The Eye of God" (nt) ..... Mar 10
Rusch, Kristine Kathryn
"Reflections on Life

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

and Death" (ss) ..... Jan 34
"Echea" (nt) ..... Jul 34

Silverberg, Robert
Reflections: The Great
Whale Hunt (ed) ..... Jan 4
—— To Clone
or Not to Clone (ed) ..... Feb 4
—— The Moon is
a Sexy Geisha (ed) ..... Mar 4
—— Voyage to
the Moon (Part One) (ed) ..... Apr 4
—— Voyage to
the Moon (Part Two) (ed) ..... May 4
—— The Science
Fictionization of Everything (ed) ... Jun 6
—— Mutant Seaweed
Engulfs the Mediterranean (ed) ... Jul 4
—— Crimes of
My Youth (ed) ..... Aug 4
—— The Gold-Digging
Ants of the Lost Plateau (ed) ..... Sep 4
Waiting for the End (nt) ..... Oct/Nov 102
—— Dem Bones,
Dem Bones (ed) ..... Oct./Nov. 4
—— Hast Seen
the White Whale? (ed) ..... Dec 4
Spinrad, Norman
On Books: Who Will Resurrect
Science Fiction? (r) ..... Mar 142
—— The Edge of
the Envelope (r) ..... Jun 129
—— The Future
of the Future (r) ..... Sep 130
The Year of the Mouse (ss) ..... Apr 60
Sterling, Bruce
"Taklamakan" (nt) ..... Oct/Nov 14
Stewart, W. Gregory
"Fishing for Lizards" (p) ..... Feb 108
"Dollar Sign" (p) ..... Apr 105
"Waiting for the Grief Fairy" (p) ... May 40
"Black Hole, Black Hole" (p) ..... Aug 49
"Recipe for a Planck
Sandwich" (p) ..... Oct/Nov 101
Strauss, Erwin S.
The SF Conventional Calendar ... Jan 160
—— ..... Feb 160
—— ..... Mar 160
—— ..... Apr 160
—— ..... May 160
—— ..... Jun 144
—— ..... Jul 144
—— ..... Aug 144
—— ..... Sep 142
—— ..... Oct/Nov 237
—— ..... Dec 143
Swanwick, Michael
"The Very Pulse of
the Machine" (ss) ..... Feb 16
"Wild Minds" (ss) ..... May 10
(& Avram Davidson) "Vergil Magus:
King Without Country" (nt) ..... Jul 78
(& Gardner Dozois) "Ancestral
Voices" (na) ..... Aug 92
"Radiant Doors" (ss) ..... Sep 84
"Archaic Planets: Nine Excerpts
from the Encyclopedia
Galactica" (ss) ..... Dec. 62

Tiedemann, Mark W.
"With Arms to Hold the Wind" (nt) Sep 26
Turzillo, Mary A.
"The Hunter's Mothers" (p) ..... Mar 34

Utley, Stephen
"The Here and Now" (ss) ..... Mar 36
"Embrace" (p) ..... Mar 99
"The Moon Does Not Envy
the Earth" (p) ..... Apr 59

Waldrop, Howard
"Scientifiction" (ss) ..... Mar 100
Watkins, William John
"The Archangel's Farewell to
Those Leaving for Earth" (p) ..... Sep 61
"Colonists" (p) ..... May 83
Watson, Ian
"The Shortest Night" (nt) ..... May 42
What, Leslie
"Say Woof" (ss) ..... Jul 100
Wilde, Dana
"Personal Cosmology" (p) ..... Jun 73
Williams, Sheila
"Meet Our Cyberspace Cadet" (a) . Jun 13
"The 1998 Isaac Asimov
Award" (a) ..... Jul 8
Williams, Walter Jon
"The Picture Business" (nt) ..... Feb 64
Winter, Laurel
"Egg Horror Poem" (p) ..... Jul 62

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

THIRTEENTH ANNUAL READERS' AWARD

Well, it's the January issue again, the start of another new year, and as our long-time readers know, that means that once again it's time for our Readers' Award poll. **Please Vote. Your ballot will be automatically entered in our drawing for a free one-year subscription.**

We consider this to be our yearly chance to hear from you, the readers of the magazine. That's the whole point behind this particular award. What were your favorite stories from *Asimov's Science Fiction* last year? This is your chance to let us know what novella, novelette, short story, poem, cover artist, and interior artist you liked best in 1997. Just take a moment to look over the Index of the stories published in last year's issues of *Asimov's* (pp. 153-156) to refresh your memory, and then list below, in the order of your preference, your three favorites in each category. (In the case of the two art awards, please list the artists themselves in order of preference, rather than the individual covers or interior illustrations—with the poetry award, however, please remember that you are voting for an individual poem, rather than for the collective work of a particular poet that may have appeared in the magazine throughout the year.)

Some further cautions: Only material from 1997-dated issues of *Asimov's* is eligible (no other years, no other magazines, even our sister magazine *Analog*). **Each reader gets one vote, and only one vote.** If you use a photocopy of the ballot, please be sure to include your name and address; your ballot won't be counted otherwise.

Works must also be categorized on the ballot as they appear in the Index. No matter what category you think a particular story ought to appear in, we consider the Index to be the ultimate authority in this regard, so be sure to check your ballots against the Index if there is any question about which category is the appropriate one for any particular story. In the past, voters have been careless about this, and have listed stories under the wrong categories, and, as a result, ended up wasting their votes. All ballots must be postmarked no later than **February 1, 1999**, and should be addressed to: **Readers' Award, Asimov's Science Fiction, Dell Magazines, 475 Park Avenue South, New York, NY 10016.** You can also vote via the Internet at **asimovs@erols.com**, but you must give us your whole U.S. mailing address. We also hope to post ballots at our website, so please check us out at **www.asimovs.com**.

Remember, you—the readers—will be the only judges for this award. No juries, no panels of experts. You are in charge here, and what you say goes. In the past, some categories have been hotly contended, with victory or defeat riding on only one or two votes, so every vote counts. Don't let it be your vote for your favorite stories that goes uncounted! Don't put it off—vote today!

The winners will be announced in an upcoming issue.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

BEST NOVELLA:

1. _____
2. _____
3. _____

BEST NOVELETTE:

1. _____
2. _____
3 _____

BEST SHORT STORY:

1. _____
2. _____
3. _____

BEST POEM:

1. _____
2 _____
3 _____

BEST COVER ARTIST:

1. _____
2. _____
3. _____

BEST INTERIOR ARTIST:

1 _____
2. _____
3. _____

SIGNATURE: _____

ADDRESS: _____

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Advertise to the World's largest mystery magazine audience with our Asimov's/Analog combined classified section. Ad Rates per issue: $2.95 per word (10 word minimum), $125 per column inch (2.25 inch maximum). SPECIAL INTRODUCTORY OFFER: Buy two issues and receive a third issue FREE. Send orders to: Dell Magazines, Classified Department, P.O. Box 1510, Clearwater, FL 33757-1510. Direct inquiries to: (800) 237-9851; Fax (727) 445-9380.

ASTROLOGY

EMPOWER YOURSELF through Earth's religion. Free Protective Pentacle. The School of Wicca, P.O. Box 297 T, Hinton, WV 25951-0297.

BOOKS/PUBLICATIONS

BUYING SCIENCE FICTION magazines, book collections. Will travel for large accumulations. Bowman, Box 167, Carmel, IN 46082.

PUBLISHING

NEW AUTHORS
PUBLISH YOUR WORK
ALL SUBJECTS CONSIDERED
Fiction, Biography, Religious, Poetry, Children's
AUTHORS WORLDWIDE INVITED.
WRITE OR SEND YOUR MANUSCRIPT TO
MINERVA PRESS
2 OLD BROMPTON ROAD, LONDON SW7 3DQ, ENGLAND

EXPAND
your opportunities
EXPLORE
new options
answer a classified ad today.

PRINTED WITH SOY INK

FREE AD OFFER IN OUR SCI-FI COMBO

NEW CLASSIFIED OFFICE

Take advantage of placing an ad in our next two issues and receive a third ad FREE!

Your ad will reach loyal Sci-Fi readers in both ANALOG SCIENCE FICTION & FACT and ASIMOV'S SCIENCE FICTION. Start your schedule with our next issue to receive your FREE ad and also benefit from our new low rates.

Call today for a new rate card.

Dell Magazine
Classified Department
P.O. Box 1510
Clearwater, FL 33757-1510
(800) 237-9851
FAX (727) 445-9380

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

SF CONVENTIONAL CALENDAR

With the holiday lull coming up, here's a look at the schedule for all winter. Plan now for social weekends with your favorite SF authors, editors, artists, and fellow fans. For an explanation of con(vention)s, a sample of SF folksongs, and info on fanzines and clubs, and how to get a later, longer list of cons, send me an SASE (self-addressed, stamped #10 [business] envelope) at 10 Hill #22L, Newark NJ 07102. The hot line is (973) 242-5999. If a machine answers (with a list of the week's cons) leave a message and I'll call back on my nickel. When writing cons, send an SASE. For free listings, tell me of your con 6 months out. Look for me at cons behind the Filthy Pierre badge, playing a musical keyboard.—Erwin S. Strauss

NOVEMBER 1998

27–29—**LosCon.** For info, write: **11513 Burbank Blvd., North Hollywood CA 91601.** Or phone: **(818) 760-9234** (10 AM to 10 PM, not collect). Con will be held in: Burbank CA (if city omitted, same as in address) at the Airport Hilton. Guests will include: Author David Brin, artist Sue Dawe, fan Marjii Ellers. The big traditional LA-area convention.

27–29—**Visions. (847) 882-8575.** O'Hare Hyatt, Chicago IL. McCoy. Dr. Who, Blake's 7, Red Dwarf, Babylon 5, Buffy.

27–29—**Creation. (818) 409-0960.** Marriot Marquis, New York NY. Creations are commercial media-oriented events.

27–29—**ConCat. (423) 637-6564.** Radisson, Knoxville TN. S. & J. Robinson, D. Elliott, R. Shelley, K. Song, the Webbs.

27–29—**SiliCon. (408) 541-0358. (E-mail) silicon@awit.com.** San Jose CA. No more news on this one, at press time.

27–29—**TerraCon. (E-mail) terracon@brigadoon.com.** Tyee Hotel, Tumwater WA. B. Simpson, Hopcroft, P. & H. Swenson.

27–29—**Darkover Grand Council. (202) 726-4396.** Holiday Inn, Timonium (Baltimore) MD. For fans of M. Z. Bradley.

DECEMBER 1998

4–6—**SMOFCon. (E-mail) kentbloom@internetmci.com.** Venue TBA, in Colorado Springs CO. Con organizers talk shop.

4–6—**DraCon. (E-mail) dracon@sci-fi.cz, or dracon@post.cz.** Hotel Santon, Brno, Czech Republic. Their big annual con.

4–6—**NordCon. (+48 58) 531-073.** Gdansk Poland. Annual convention of Polish SF clubs.

JANUARY 1999

1–3—**EveCon, 1607 Thomas Rd., Ft. Washington MD 20744. (301) 292-5231.** Holiday Inn HoliDome, Frederick MD.

2—**Creation, 664A W. Broadway, Glendale CA 91204. (818) 409-0960.** Plano Center, Dallas TX. Commercial Media Event.

8–10—**GAFilk, 2715 Lenox Rd. #B-5, Atlanta GA 30324. (404) 321-2112.** Ramada Airport South. SF/fantasy folksinging.

15–17—**Arisia, 1 Kendall Sq. #322, Cambridge MA 02139. (E-mail) Info@arisia.org.** Boston MA. R. Allen, Nielsen-Haydens.

15–17—**RustyCon, Box 84291, Seattle WA 98124. (Web) www.ironhorse.com/~rustycon.** Monika Livingstone, M. Citrak.

22–24—**ConFusion, Box 8284, Ann Arbor MI 48107. (734) 487-8743.** Van Dyke Park Suites, Warren MI. Bujold, DeVore.

22–24—**Potlatch, 355 Howard St., Eugene OR 97404. (E-mail) potlatch@efn.org.** Doubletree Inn. Literary SF convention.

FEBRUARY 1999

5–7—**XI-Lophone, 34 Hill Top Dr., Oakham, Leicestershire LE15 6NF, UK.** Windsor Hotel, Berkshire UK. SF folksinging.

12–14—**Boskone, Box 809, Framingham MA 01701. (617) 625-2311.** Sheraton Tara. C. Willis, S. Youll, T. Harvia, Thayer.

12–14—**RadCon, 2527 W. Kennewick Ave. #162, Kennewick WA 99336. (509) 943-0713.** Doubletree, Pasco WA. Mike Moscoe.

12–14—**KatsuCon, Box 11582, Blacksburg VA 24060.** Hyatt Regency, Crystal City (Arlington) VA. Anime.

12–15—**CostumeCon, Box 34739, Philadelphia PA 19101. (AOL) CCXVII.** Hilton, Cherry Hill NJ. Costumers' annual meet.

12–15—**Gallifrey, Box 3021, N. Hollywood CA 91609. (818) 752-3756.** Best Western Airtel, Van Nuys CA. Dr. Who.

19–21—**Lightspeed, 16 Bramwell, Eastwood, Rotherham S. Yorks. S65 1RZ, UK. (01709) 367-321.** Aldred, Ashton. Media.

26–28—**Redemption, 28 Diprose Rd., Corfe Mullen, Wimborne Dorset BH21 3QY, UK.** Int'l. Hotel, Ashford, Kent. Media.

MARCH 1999

4–7—**World Horror Con, Box 148, Clarkston GA 30021.** Marriott North Central. M. Bishop, Shirley, Gaiman, Snellings.

5–7—**LunaCon, Box 3566, New York NY 10008.** Hilton, Rye Brook NY. Author Vernor Vinge, artist Bob Eggleton.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

NEXT ISSUE

FEBRUARY LEAD STORY

Acclaimed new writer **L. Timmel Duchamp** spins a fascinating, engrossing, and thoroughly disturbing story of a young woman who finds herself with some very hard choices to make when her father has a catastrophic stroke, life-and-death choices of a *new* sort, of a sort that nobody has ever had to make before, the kind of choices that will not go away no matter how much you want them to, the kind of choices you have to face when you're burdened with a new sort of "Living Trust," and know that no matter *what* you do, your actions will have vast implications for society for hundreds of years to come. . . .

TOP-FLIGHT WRITERS

Veteran author **Tom Purdom** takes us across the Galaxy and deep into the far future, where we discover that even the enhanced, augmented, and superior people who live in that high-tech future are still inclined to play some very old, and very dangerous, "Fossil Games"; Nebula- and World-Fantasy-Award-winner **Michael Swanwick**, one of our most acclaimed and prolific authors, gives us a hard-edged and hard-headed look at what you'd *really* need in order to Live Forever (better start planning *now!*), in "Ancient Engines"; the popular **David Marusek** returns with a wry and inventive look behind the scenes of the political process, twenty-first century style, and finds that perhaps things haven't changed that much *after all*, in the flamboyant "Cabbages and Kale"; **Robert Reed**, another of our most prolific and popular authors, takes us to a war-torn future Earth where a secret mission behind the lines could spell either The End or The Beginning of it all, in the weird, wild, and unsettling story of "Mac and Me"; and **Michael Armstrong** returns to these pages after a long absence with the intense and powerful story of spacemen embroiled in a seemingly endless interstellar conflict who are forced to make their own hard choices when they're suddenly "Recalled to Home."

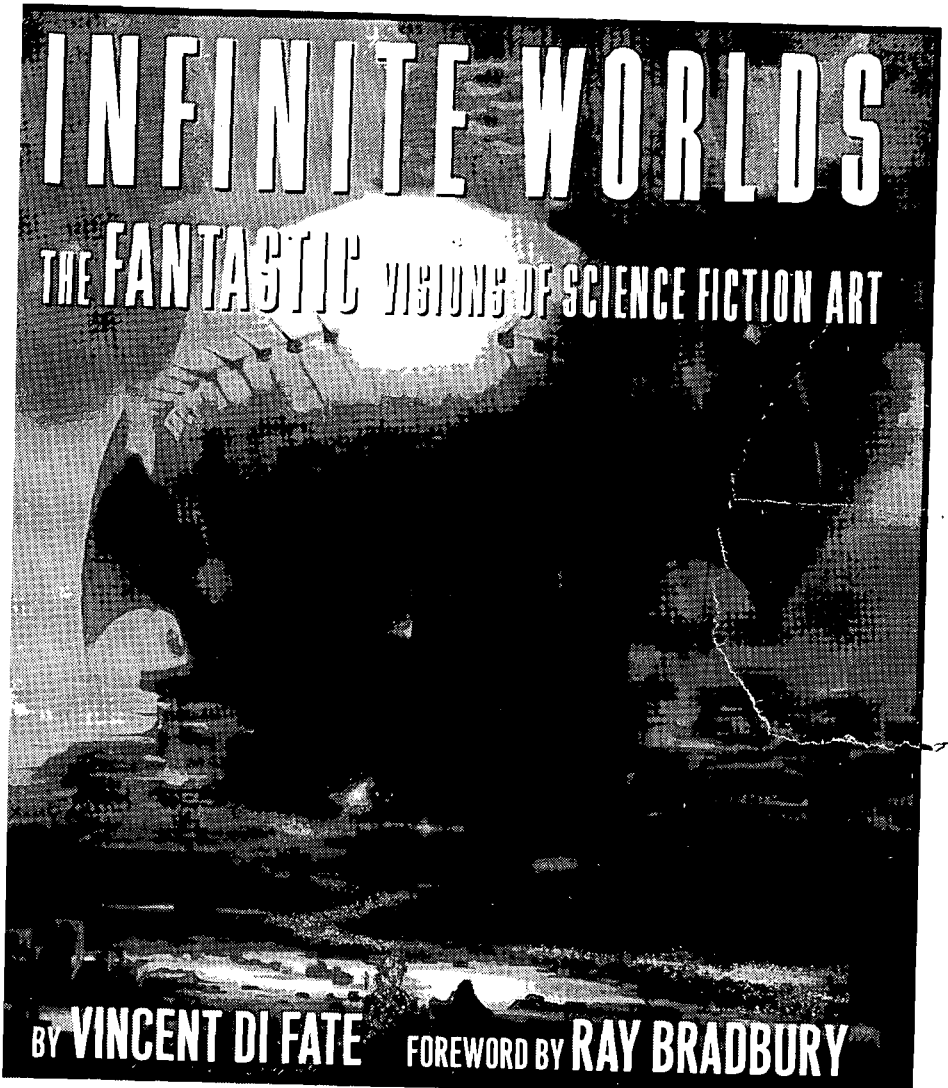
EXCITING FEATURES

Robert Silverberg's "Reflections" column passes along the glad news, "End of the World Canceled"; and **Paul Di Filippo** brings us "On Books"; plus an array of cartoons, poems, letters, and other features. Look for our February 1999 issue on sale on your newsstand on December 22, 1998, or subscribe today (you can now also subscribe electronically, online, at our new *Asimov's* Internet website, at **http://www.asimovs.com**), and be sure that you miss none of the great stuff we have coming up for you in 1999! And keep in mind, a subscription to *Asimov's* makes a great Christmas gift, too!

COMING SOON

Great new stories by **R. Garcia y Robertson**, **Stephen Baxter**, **Eleanor Arnason**, **Robert Reed**, **William Barton**, **Kage Baker**, **Brian Stableford**, **Tony Daniel**, **Rick Shelley**, **Esther M. Friesner**, **Eliot Fintushel**, **Gregory Feeley**, **Jane Yolen**, **Tom Purdom**, **Andy Duncan**, and many others.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



From movie posters to book covers, from raging raptors to video villains, here is the definitive collection of science fiction art. Artist Vincent di Fate has compiled nearly 700 images from the worlds of science fiction literature, television, and film to represent 150 years of graphic imagination, including work by Frank Frazettta, Michael Whelan, Leo and Diane Dillon, and many others. With its dazzling four-color illustrations and fascinating text, *Infinite Worlds* is a treasure every art and science fiction devotee will want to own.

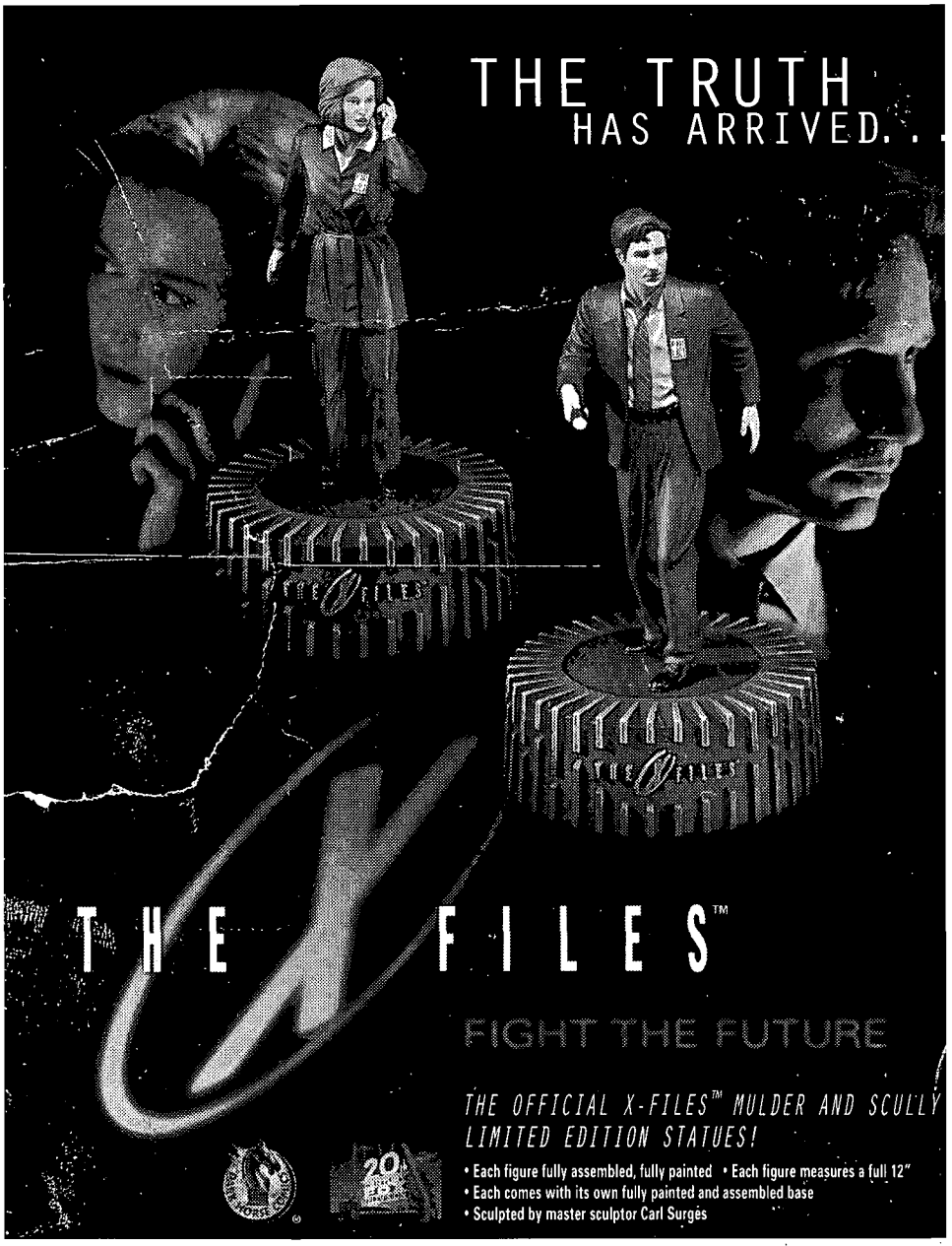
$45.00

IN BOOKSTORES NOW FROM PENGUIN STUDIO

or call 1-800-253-6476 to order

© The Wonderland Press

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED


THE TRUTH
HAS ARRIVED. . .
THE X FILES™
FIGHT THE FUTURE
THE OFFICIAL X-FILES™ MULDER AND SCULLY
LIMITED EDITION STATUES!
• Each figure fully assembled, fully painted • Each figure measures a full 12"
• Each comes with its own fully painted and assembled base
• Sculpted by master sculptor Carl Surgès

Please send me ☐ Agent Scully statues @ $99.95 ea. Please send me ☐ Agent Mulder statues @ $99.95 ea.

For each figurine, add $10 Shipping & Handling U.S., $12 Canada/Mexico, $50 International. New York residents please add 8.25% sales tax.

METHOD OF PAYMENT: ☐ Cash ☐ Check ☐ Money Order ☐ Visa ☐ MasterCard

Send Cash, Check, or Money Order to:
Dark Horse Comics, Dept. X
10956 SE Main St.
Milwaukie, OR 97222

AMOUNT ENCLOSED
$

PAYMENT ACCEPTED IN U.S. FUNDS ONLY. Offer available in U.S., Canada, Mexico, UK, Japan, Australia, France, Germany, Italy, Spain, and all of Central/South America. All items subject to availability. Refunds given only for items that are sold out. Please allow 4-6 weeks for delivery. If you do not wish to cut out coupon, we will accept written orders.

Name as it appears on card

Street Address

City State Zip

Postal Code Country

Account # Signature

Card expiration date (Mo./Yr.) Daytime phone #

The X-Files™ & © 1998 Twentieth Century Fox Film Corporation. All rights reserved. Dark Horse Comics® and the Dark Horse logo are trademarks of Dark Horse Comics, Inc. registered in various categories and countries. All rights reserved.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED